

BEFORE THE DEPARTMENT OF ENVIRONMENTAL QUALITY
OF THE STATE OF MONTANA

In the matter of the amendment of ARM)	NOTICE OF PUBLIC HEARING ON
17.50.403, 17.50.410, 17.50.501 through)	PROPOSED AMENDMENT,
17.50.503, 17.50.508, 17.50.509, and)	ADOPTION, AND REPEAL
17.50.513; the adoption of New Rules I)	
through LI; and the repeal of ARM)	(SOLID WASTE)
17.50.505, 17.50.506, 17.50.510,)	
17.50.511, 17.50.526, 17.50.530,)	
17.50.531, 17.50.542, 17.50.701,)	
17.50.702, 17.50.705 through 17.50.710,)	
17.50.715, 17.50.716, and 17.50.720)	
through 17.50.726 pertaining to the)	
licensing and operation of solid waste)	
landfill facilities)	

TO: All Concerned Persons

1. On April 3, 2009, at 10:30 a.m., a public hearing will be held in Room 111 of the Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed amendment, adoption, and repeal of the above-stated rules.

2. The department will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, please contact Elois Johnson, Paralegal, no later than 5:00 p.m., March 16, 2009, to advise us of the nature of the accommodation that you need. Please contact Elois Johnson at Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2630; fax (406) 444-4386; or e-mail ejohnson@mt.gov.

3. The department is proposing to adopt New Rule I into ARM Title 17, chapter 50, subchapter 5, and the new subchapters listed below into ARM Title 17, chapter 50. The department is proposing to adopt New Rules II through XI as New Subchapter I; New Rules XII through XXIX as New Subchapter II; New Rules XXX through XXXIV as New Subchapter III; New Rules XXXV through XLVI as New Subchapter IV; and New Rules XLVII through LI as New Subchapter V.

4. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

17.50.403 DEFINITIONS Unless the context requires otherwise, in this subchapter the following definitions apply:

(1) through (5) remain the same.

(6) "Contaminated soil" means soil, rocks, dirt, or earth that has been made impure by contact, commingling, or consolidation with organic compounds such as petroleum hydrocarbons. ~~The term~~ This definition does not include soils

contaminated solely by inorganic metals, or soils that meet the definition of hazardous waste under ARM 17.54.201 Title 17, chapter 53, or regulated PCB (polychlorinated biphenyls) contaminated soils.

(7) through (12) remain the same.

(13) "Interim closure" means the period of time from the department's receipt of the certification required in ARM 17.50.530(1)(h) [NEW RULE XLIX(10)] until the department ~~verifies closure compliance under ARM 17.50.530~~ approves that certification.

(14) through (54) remain the same.

AUTH: 75-10-115, 75-10-204, 75-10-221, MCA

IMP: 75-10-115, 75-10-221, MCA

17.50.410 ANNUAL OPERATING LICENSE REQUIRED (1) through (6)(c) remain the same.

(7) ~~Fees at a facility in interim closure must be held in abeyance by the department. Once a facility is in interim closure, its duty to pay license fees is suspended. If the department determines, pursuant to ARM 17.50.530 [NEW RULE XLIX(10)], that not to approve certification of closure was not completed in compliance with the closure plan, the owner or operator shall pay to the department the suspended fees held in abeyance to the department. An owner or operator of a facility for which the department has determined by the department not to have completed closure in compliance with the facility's closure plan approve certification of closure shall, after the owner or operator believes that closure has been completed in compliance with the closure plan, submit a new certification as required in ARM 17.50.530(1)(h) under [NEW RULE XLIX(10)]. The facility is then again in interim closure, pending re-inspection and verification of closure compliance approval of closure certification by the department.~~

Tables 1 through 3 remain the same.

AUTH: 75-10-115, 75-10-204, 75-10-221, MCA

IMP: 75-10-115, 75-10-204, 75-10-221, MCA

REASON: The department is proposing to amend the definition of "contaminated" soils in ARM 17.50.403(6). The current definition cites a rule of the department, ARM 17.54.201, that was repealed in 2001. That rule was repealed at p. 169, 2001 Montana Administrative Register, issue number 2, effective January 26, 2001, and new Montana hazardous waste rules were adopted. One of those new rules, ARM 17.53.301, incorporates by reference a regulation of the federal Environmental Protection Agency (EPA), 40 CFR 260.10, that defines contaminated soils that constitute hazardous waste. ARM 17.50.403(6) has not previously been updated to cite the proper hazardous waste rule. It is necessary to change the citation in that rule so that it refers to the current definition in the hazardous waste rules. In addition, a definition of "contaminated soils" is being proposed to be added to ARM 17.50.502. This definition explicitly excludes soils contaminated by polychlorinated biphenyls (PCBs). Because the phrase "contaminated soils, defined in ARM 17.50.403," is used in ARM 17.50.410 to establish the licensing fee for a

landfarm that could treat contaminated soils and that would be regulated under ARM Title 17, chapter 5, subchapter 5, it is necessary to have the definitions be identical. So, it is necessary to amend ARM 17.50.403 to have the same definition of "contaminated soils" as in ARM 17.50.502.

Existing ARM 17.50.410, which uses the definition of interim closure from existing ARM 17.50.403(13), requires the department to hold in abeyance fees owed by a solid waste management facility after the facility's engineer certifies that the facility has been closed according to its approved closure plan, but before the department has inspected the facility and approved the certification. The proposed amendments to ARM 17.50.403 and 17.50.410, which would substitute references to New Rule XLIX for the reference to ARM 17.50.530, the existing closure rule, are necessary because ARM 17.50.530 is being proposed to be repealed, with similar closure requirements being proposed in New Rule XLIX. No substantive change is intended.

17.50.501 PURPOSE AND APPLICABILITY (1) and (2) remain the same.

(3) These rules apply to All applicants, licensees, owners, and operators of solid waste management systems and facilities shall comply with this subchapter, except as otherwise specifically provided in this subchapter. Wherever there is a requirement imposed on an owner or operator in this subchapter, the licensee also shall comply with that requirement.

~~(4) The effective dates of ARM 17.50.506 and 17.50.511(1)(e) and (g) are extended until April 9, 1994, as they apply to existing landfill units and lateral expansions to existing units that meet the following requirements:~~

~~(a) the unit disposed of less than 100 tons per day of solid waste between October 9, 1991, and October 9, 1992;~~

~~(b) the unit does not dispose of more than an average per month of 100 tons per day of solid waste between October 9, 1993 and April 9, 1994; and~~

~~(c) the unit is not on the national priorities list (NPL) as found in 40 CFR, part 300, appendix B.~~

(4) Whenever a person, including an applicant or owner or operator, is required by this subchapter to submit a document for department approval of an action, the person may not take that action unless the person first submits a document containing all information necessary for the department to determine whether the action complies with the requirements of this subchapter and obtains department approval.

~~(5) Existing MSWLF units that meet the requirements for the small community exemption found in ARM 17.50.506(16) or the requirements of (4) of this rule that receive waste after October 9, 1993, and stop receiving waste prior to April 9, 1994, are only subject to the final cover requirements found in ARM 17.50.530. Final cover must be installed by October 9, 1994. Owners or operators that fail to complete cover installation by October 9, 1994, are subject to all of the requirements of this subchapter unless otherwise specified. When authorized by a court order or an agreement between the department and a landowner on whose property a violation of Title 75, chapter 10, part 2, MCA, or this subchapter has occurred, the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or this subchapter.~~

AUTH: 75-10-204, MCA
IMP: 75-10-204, MCA

REASON: The proposed amendments to ARM 17.50.501(3) are necessary to provide an express rather than an implied requirement that all applicants, licensees, owners, and operators of solid waste management systems and facilities comply with the requirements of ARM Title 17, chapter 50, subchapters 4 through New Subchapter V. The existing rules in subchapter 5 are based on EPA regulations found in 40 CFR Parts 257 and 258. EPA does not license facilities, but a solid waste management facility in Montana may not operate without a license under Montana law, pursuant to 75-10-221, MCA. Therefore, it is necessary to add language making it clear that licensees are required to comply with the solid waste rules. The existing rules include requirements for the application and design process that applicants shall meet prior to the construction of, and receipt of waste at, a facility, and the additional word "applicant" clarifies that the rules apply to applicants also.

The language proposed for deletion in (4) and (5) refers to effective dates for certain rules that include delayed effective dates to allow smaller systems time to come into compliance or close. These effective dates have long since passed and all of the rules in the subchapter are currently applicable.

The new language that would be added to (4) provides an express rather than an implied requirement that, whenever a person is required to submit a document to the department for approval of an action, the person making the submission may not take that action unless it is approved by the department. The proposed language is necessary to allow the department to ensure that the document contains all necessary information and that the action complies with the rules.

The new language proposed to be added to ARM 17.50.501(5) is necessary to clarify that the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or ARM Title 17, chapter 50, subchapters 4 through New Subchapter V. There are numerous illegal dumps and other solid waste management systems that are operating in violation of law and rule in Montana that require remedial action, including cleanup, to correct violations of the solid waste laws and rules. There has not been explicit authority in rule for the department to conduct corrective action itself or through a third party. The proposed amendment is necessary to expressly state that the department has the authority to conduct such remedial actions itself or to contract for them.

The authority would be limited to those situations where the department and the landowner had reached an agreement, or where a court had issued an order, authorizing the department to physically remediate because, for other situations, the department would need, but has not been given, the legislative authority to unilaterally remediate property. Adoption of administrative rules allowing consensual or court-ordered remediation is authorized by 75-10-204(8), MCA.

17.50.502 DEFINITIONS In addition to the ~~terms defined~~ definitions in 75-10-203, MCA, ~~as used in this subchapter, the following terms shall have the meanings or interpretations shown below~~ definitions apply to this subchapter:

- (1) remains the same.
- (2) "Active life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities in accordance with ARM 17.50.530 [NEW SUBCHAPTER V].
- ~~(3) "Active portion" means that part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with ARM 17.50.530.~~
- (4) remains the same, but is renumbered (3).
- ~~(5) "Aquifer" means any geologic formation, group of formations, or part of a formation capable of yielding significant quantities of ground water to wells or springs.~~
- (6) (4) "Clean fill" means soil, dirt, sand, gravel, rocks, and rebar-free concrete, emplaced free of charge to the ~~person placing the fill~~ property owner, in order to adjust or create topographic irregularities for agricultural or construction purposes.
- ~~(7) "Closed unit" means any solid waste disposal unit, trench, cell or area that no longer receives solid waste and has been closed in accordance with department rules.~~
- (8) (5) "Closure" means the process by which an owner or operator of a facility closes all or part of a facility in accordance with a department-approved closure plan and all applicable closure requirements specified in ARM 17.50.530 [NEW SUBCHAPTER V].
- ~~(9) "Compacted soil liner" means recompacted native or amended soil with a minimum thickness of 3 feet with adequate moisture content and compaction to achieve a hydraulic conductivity of less than or equal to 1×10^{-7} cm/sec.~~
- ~~(10) "Commercial waste" means all types of solid wastes generated by stores, offices, restaurants, warehouses, and other non-manufacturing activities, and non-processing wastes such as office and packing wastes generated at industrial facilities.~~
- ~~(11) "Conditionally exempt small quantity generator wastes (CESQG wastes)" means wastes from a generator defined in ARM 17.54.401(4)(c).~~
- (12) and (13) remain the same, but are renumbered (6) and (7).
- ~~(14) "Cost" means all expenses associated with the permitting, licensing, design, construction, environmental compliance, operation, maintenance, ground water monitoring, corrective action, closure and post closure care of any facility.~~
- ~~(15) "Director" means the chief administrative officer of the department of environmental quality.~~
- ~~(16) "Disease vectors" means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.~~
- ~~(17) "EPA" means the United States environmental protection agency.~~
- (8) "Contaminated soil" means soil, rocks, dirt, or earth that has been made impure by contact, commingling, or consolidation with organic compounds such as petroleum hydrocarbons. This definition does not include soils contaminated solely by inorganic metals, soils that meet the definition of hazardous waste under ARM Title 17, chapter 53, or regulated PCB (polychlorinated biphenyls) contaminated soils.
- (9) "Department" means the Department of Environmental Quality provided for in 2-15-3501, MCA.

~~(18)~~ (10) "Existing disposal unit" means a unit within the licensed waste boundary of any solid waste disposal unit that is receiving solid waste as of October 9, 1993. Waste placement in existing units must be consistent with past operating practices or modified practices to ensure good management facility.

~~(19)~~ (11) "Facility" means a manufacturing, processing or assembly establishment; a transportation terminal; or a treatment, storage or disposal unit operated by a person at one site. The term includes property where solid waste management is occurring or has occurred. It includes all contiguous land and structures, other appurtenances, and improvements on the land (licensed or unlicensed) ever used for the storage, treatment or disposal management of solid waste.

(20) and (21) remain the same, but are renumbered (12) and (13).

~~(22) "Ground water class" means a ground water quality classification established in ARM 17.30.1002.~~

~~(23) "Ground water quality standards" means the standards for ground water quality set forth in ARM 17.30.1003.~~

(14) "Ground water" means water below the land surface in a zone of saturation.

~~(24)~~ (15) "Industrial solid waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under subtitle C of the federal Resource Conservation and Recovery Act of 1976 (RCRA). The definition includes, but is not limited to, waste resulting from the following manufacturing or industrial processes:

- (a) electric power generation;
- (b) fertilizer/agricultural chemicals;
- (c) food and related products/byproducts;
- (d) inorganic chemicals;
- (e) iron and steel manufacturing;
- (f) leather and leather products;
- (g) nonferrous metals manufacturing/foundries;
- (h) organic chemicals;
- (i) plastics and resins manufacturing;
- (j) pulp and paper industry;
- (k) rubber and miscellaneous plastic products;
- (l) stone, glass, clay, and concrete products;
- (m) textile manufacturing;
- (n) transportation equipment; and
- (o) water treatment.

~~(25) "Infectious waste" means waste defined in 75-10-1003(4), MCA.~~

~~(26)~~ (16) "Land application unit" means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for agricultural purposes or for treatment and disposal. The definition does not include manure spreading operations.

(27) through (29) remain the same, but are renumbered (17) through (19).

(20) "Leachate collection system" means an engineered structure, located above a liner and below the refuse in a landfill unit, designed to collect leachate.

(21) "Leachate removal system" means an engineered structure that allows for the removal of leachate from a landfill unit. A leachate removal system may be, but is not necessarily, used in conjunction with a leachate collection system.

(22) "Licensed boundary" means the perimeter of the area within a solid waste management facility that the department has approved for solid waste management under ARM 17.50.513.

(23) "Licensee" means a person who has, or persons who have, been issued a license by the department to operate a solid waste management system.

(30) remains the same, but is renumbered (24).

~~(31) "Lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25° C and atmospheric pressure.~~

(32) remains the same, but is renumbered (25).

~~(33) "Municipal solid waste landfill unit (or MSWLF unit)" means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile. A MSWLF unit also may receive other types of RCRA subtitle D wastes, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion.~~

~~(34) "New unit" means any solid waste disposal unit that has not received waste prior to October 9, 1993.~~

~~(35) "Open burning" means the combustion of solid waste without:~~

~~(a) control of combustion air to maintain adequate temperature for efficient combustion;~~

~~(b) containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and~~

~~(c) control of the emission of the combustion products.~~

(36) through (38) remain the same, but are renumbered (26) through (28).

(29) "Person" has the meaning given in 75-10-203, MCA.

(30) "Post-closure care" means the activities required at a landfill after the completion of closure in which all aspects of the landfill containment, extraction, control, and monitoring systems must be inspected, operated, and maintained in accordance with a department-approved post-closure plan and all applicable requirements in [NEW SUBCHAPTER VI].

(31) "RCRA" means the federal solid Waste Disposal Act, as amended by and hereinafter referred to as the Resource Conservation and Recovery Act of 1976 and subsequent amendments, codified at 42 USC 6901 through 6992k.

~~(39) "Qualified ground water scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in natural sciences or engineering and has sufficient training and experience in ground water hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university programs that enable that individual to make sound professional judgements regarding ground water monitoring, contaminant fate and transport, and corrective action.~~

~~(40) "Refuse container" means a portable facility used for the temporary storage of solid waste. Containers are emptied periodically and the solid waste is then taken to a disposal or resource recovery facility.~~

~~(41) remains the same, but is renumbered (32).~~

~~(33) "Residue" means the waste material remaining after processing, incineration, composting, recovery, or recycling have been completed. Residues are usually disposed of in landfills.~~

~~(42) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.~~

~~(43) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.~~

~~(44) "Saturated zone" means that part of the earth's crust in which all voids are filled with water.~~

~~(45) remains the same, but is renumbered (34).~~

~~(35) "Solid waste" has the meaning given in 75-10-203, MCA.~~

~~(46) "Sewage sludge" means solid, semi solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during the preliminary treatment of domestic sewage in a treatment plant.~~

~~(47) "Sludge" means any solid, semi solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.~~

~~(48) remains the same, but is renumbered (36).~~

~~(37) "Special waste" has the meaning given in 75-10-802, MCA.~~

~~(49) "Structural components" means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of a solid waste management system that is necessary for protection of human health and the environment.~~

~~(50) remains the same, but is renumbered (38).~~

~~(51) "Transfer station" means a solid waste management facility that can have a combination of structures, machinery, or devices, where solid waste is taken from collection vehicles (public, commercial or private) and placed in other transportation units for movement to another solid waste management facility.~~

~~(52) remains the same, but is renumbered (39).~~

~~(53) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.~~

~~(54) remains the same, but is renumbered (40).~~

~~(55) "Waste management unit boundary" means a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer.~~

(41) "Waste boundary" means the perimeter of the area approved by the department for disposal of solid waste that is located within the licensed boundary of a solid waste management facility.

(56) remains the same, but is renumbered (42).

~~(57) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.~~

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: Many existing definitions in ARM 17.50.502 would be moved to the proposed new subchapters where the particular terms or phrases are used, so they are being proposed for deletion here. Definitions of "contaminated soil," "collection system," "department," "existing disposal unit," "ground water," "leachate removal system," "licensed boundary," "licensee," "person," "post-closure care," "RCRA," "residue," "special waste," and "waste boundary" are proposed to be added because those terms and phrases are used in the rules in this subchapter, and the definitions are needed to provide clarity to the substantive requirements in the rules.

The definition of "existing disposal unit" is proposed to be amended because the phrase is used in the definition of "lateral expansion," which is defined in existing ARM 17.50.502(28), which would be renumbered (18). "Existing disposal unit" would be defined as an area within the licensed waste boundary of a solid waste management facility. This means that it has been approved to receive solid waste. A lateral expansion is a horizontal expansion of an existing disposal unit, which is an area approved to receive solid waste that lies within the approved waste boundary at a licensed landfill. A lateral expansion triggers regulatory requirements such as the requirement of a liner and submission, review, and approval of plans and specifications of new construction. It is necessary to define what constitutes an existing disposal unit so that an expansion past those boundaries easily can be identified and applicable regulatory requirements can be imposed.

The proposed amendments to the definitions of "active life" and "closure" would update the citation to the rules containing closure requirements. The existing rule, ARM 17.50.530, is proposed to be repealed and New Subchapter V would address closure requirements.

The proposed amendment to the definition of "facility" would refer to a place where management of solid waste, including recycling and waste recovery, occurred. These activities are included in the definition of "solid waste management system" in 75-10-203, MCA. The amendments are necessary because the department is planning to adopt rules for the licensing of recycling and waste recovery facilities.

The proposed amendment to the definition of "industrial solid waste" refers to the definition in RCRA. The amendment clarifies the definition, but does not change the meaning.

The proposed amendment to the definition of "land application unit" removes the exclusion for manure spreading operations from the first sentence of the definition and adds it as a separate sentence at the end of the definition. The revision clarifies the definition, but does not change the meaning.

The definition of "licensed boundary" is proposed to be added to the rule because it would be used in ARM 17.50.508, the license application rule, to require the submission of a new application when an expansion of a licensed boundary of a solid waste management system is proposed. This is necessary because the department conducts an environmental review on applications for licenses and notifies the public so it may be involved in licensing decisions. Once an area is licensed as part of a solid waste management disposal system, landfill units may be constructed and waste may be received inside that area without further environmental review or public notification. Therefore, all environmental review, and public review of, the impacts of solid waste management that could occur within a licensed boundary must be completed at the time a licensed boundary is established or expanded. The addition of the phrase "licensed boundary" to the definitions and in ARM 17.50.508 would make this clear.

The definition of "waste boundary" is proposed to be added to the rule because that phrase would be used in the definition of "existing disposal unit," which in turn is used in the definition of "lateral expansion." "Waste boundary" is used in the definition of "lateral expansion" in the federal EPA regulations at 40 CFR 258.2, but is not defined there. It is necessary to define that phrase because it is used to determine when a lateral expansion would occur. It would be defined as the perimeter of the area where the disposal of waste has been approved by the department at a licensed facility. Waste disposal outside that approved area would constitute a new unit lateral expansion, and lateral expansion requirements would be triggered.

17.50.503 WASTE GROUPS (1) Solid wastes are grouped based on physical and chemical characteristics which determine the degree of care required in handling and disposal and the potential of the wastes for causing environmental degradation or public health hazards. Solid wastes are categorized into ~~3~~ three groups:

(a) Group II wastes include decomposable wastes and mixed solid wastes containing decomposable material but exclude regulated hazardous wastes.

Examples include, but are not limited to, the following:

(i) remains the same.

(ii) commercial and industrial solid wastes such as packaging materials, liquid or solid industrial process wastes ~~which~~ that are chemically or biologically decomposable, contaminated soils, crop residues, manure, chemical fertilizers, and emptied pesticide containers ~~which~~ that have been triple rinsed or processed by methods approved by the department.

(b) through (2) remain the same.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: The proposed addition of contaminated soils to the Group II waste list would expressly recognize that contaminated soils are not inert and that they may not be managed as Group III or IV wastes. As Group II wastes, they must either be landfarmed to reduce the concentration of petroleum compounds below certain standards or disposed of at a Class II landfill with its more rigorous requirements, including liners, caps, and monitoring, for isolating waste from ground water and the environment.

17.50.508 APPLICATION FOR SOLID WASTE MANAGEMENT SYSTEM

LICENSE ~~(1) Any owner or operator wishing to establish a solid waste management system shall first submit an original application and 3 copies for a license to the department. The application must be signed by the person responsible for the overall operation of the facility. The department shall furnish application forms to interested persons. Such forms shall require at least the following information~~ Prior to disposing of solid waste or operating a solid waste management system or expanding a licensed boundary, a person shall submit to the department for approval an application for a license to construct and operate a solid waste management system. The applicant shall use the application form provided by the department. The applicant shall provide the following information:

~~(1) through (9) remain the same, but are renumbered (a) through (i).~~

~~(40) (j) geological, hydrological, and soils information, including at least the following: and plans required in [NEW RULE XLV];~~

~~(a) Class II disposal facilities must submit geological, hydrological, and soil information that includes the following at a minimum:~~

~~(i) a hydrogeological and soils study as specified in ARM 17.50.705;~~

~~(ii) types and regional thickness of unconsolidated soils materials;~~

~~(iii) types and regional thickness of consolidated bedrock materials;~~

~~(iv) regional and local geologic structure, including bedrock strike and dip, and fracture patterns;~~

~~(v) geological hazards including but not limited to slope stability, faulting, folding, rockfall, landslides, subsidence, or erosion potential, that may affect the design and operation of the facility for solid waste management;~~

~~(vi) depth to and thickness of perched ground water zones and uppermost aquifers;~~

~~(vii) information regarding any domestic wells within one mile of the site boundary, including well location, well depth, depth to water, screened intervals, yields and aquifers tapped;~~

~~(viii) an evaluation of the potential for impacts to existing surface water and ground water quality from the proposed facility for solid waste management;~~

~~(b) transfer station and Class III and Class IV disposal facility applications must include sufficient soils, hydrologic and geologic information so that the department can evaluate the proposed safety and environmental impact of the proposed design;~~

~~(c) a ground water monitoring plan or a demonstration meeting the requirements of ARM 17.50.723 must be submitted for Class IV disposal facilities.~~

(k) for a Class II or Class IV disposal facility, a ground water monitoring plan or a demonstration meeting the requirements of [NEW RULE XXXVII];

(11) and (12) remain the same, but are renumbered (l) and (m).

(n) regional map(s), with a recommended minimum scale of 1:62,500 and a minimum size of 8 1/2 inches by 11 inches, that delineate(s) the following:

- (i) existing and proposed collection, processing, and disposal systems;
- (ii) the location of the closest population centers; and
- (iii) the local transportation systems, including highways, airports, and

railways;

(o) vicinity map(s), with a recommended minimum scale of 1:24,000 and a minimum size of 8 1/2 inches by 11 inches, that delineate(s) the following within one mile of the facility boundaries:

- (i) zoning and existing and allowed land use;
- (ii) residences;
- (iii) surface waters;
- (iv) access roads;
- (v) bridges;
- (vi) railroads;
- (vii) airports;
- (viii) historic sites; and
- (ix) other existing and proposed artificial or natural features relating to the

project;

(p) site plan(s), with a recommended minimum scale of 1:24,000 with five foot contour intervals and a recommended minimum size of 8 1/2 inches by 11 inches, that delineate(s) the following within, or associated with, the facility:

(i) property ownership boundaries within one mile of the proposed licensed boundary;

- (ii) proposed waste and licensed boundaries;
- (iii) the location of existing and proposed:
 - (A) soil borings;
 - (B) monitoring wells;
 - (C) buildings and appurtenances;
 - (D) fences;
 - (E) gates;
 - (F) roads;
 - (G) parking areas;
 - (H) drainages;
 - (I) culverts;
 - (J) storage facilities or areas; and
 - (K) loading areas;

- (iv) existing and proposed elevation contours;
- (v) direction of prevailing winds; and

(vi) the location, within one mile of the proposed licensed boundary, of:

- (A) residences;
- (B) potable wells;
- (C) surface water bodies; and
- (D) drainage swales;

(q) map(s), within 1,000 feet of the proposed licensed boundary, indicating:

- (i) state waters;

(ii) wetlands; and

(iii) floodplains;

(r) a landfill design plan pursuant to [NEW RULE XXXIV];

~~(13) site maps and plans, drawn to a convenient common scale, that show the location and dimensions of any planned excavations, buildings, roads, fencing, access, or other structures proposed on site;~~

~~(14) in addition to the above required site plan, all facilities which manage Group II waste must submit technical design specifications and a site plan that includes the following:~~

~~(a) the type, quantity, and location of any material that will be required for use as a daily and intermediate cover over the life of the site and facility;~~

~~(b) the type and quantity of any material that will be required for use as liner material or final cover, including its compaction density and moisture content specifications, the design permeability, and construction quality control and construction quality assurance plans;~~

~~(c) the location and depth of cut for any liners;~~

~~(d) the location and depths of any proposed fill or processing areas;~~

~~(e) the location, dimensions, and grades of any surface water diversion structures;~~

~~(f) the location and dimensions of any surface water containment structures, including those designed to impound contaminated runoff leachate, sludge, or liquids for evaporative treatment;~~

~~(g) the location of any proposed monitoring points for surface water, ground water quality, and explosive gases;~~

~~(h) the location, type, and dimensions of any fencing to be placed on site;~~

~~(i) the final contours and grades of any fill surface after closure;~~

~~(j) the location of each discrete phase of development;~~

~~(k) the design details and specifications of any final cap, liner, and leachate collection and removal system, including construction quality control and assurance plans and testing for construction of these elements of design;~~

~~(l) a location map showing all the proposed structures and areas for unloading, baling, compacting, storage, and loading, including the dimensions, elevations, and floor plans for these structures and areas, including the general process flow; and~~

~~(m) the design details and specifications of the facility's drainage, septic and water supply systems;~~

~~(15) through (18) remain the same, but are renumbered (s) through (v).~~

~~(19) (w) closure and post-closure care plans; and~~

~~(20) (x) for a Class II or Class IV solid waste management facility, or a waste tire facility subject to 75-10-216, MCA, a copy of the proposed financial assurance required by ARM 17.50.540 or 75-10-216, MCA;~~

(y) a copy of a proposed deed notation that meets the requirements in [NEW SUBCHAPTER II];

(z) a demonstration required in [NEW RULES IV through IX], if applicable; and

(aa) any other information determined by the department to be necessary to protect human health or the environment, and requested by the department.

(2) An applicant shall submit with the application a copy of a proposed policy of general liability insurance to cover bodily injury or property damage to third persons caused by sudden accidental occurrences at the facility that meets the requirements of [NEW RULE XXV].

AUTH: 75-10-204, 75-10-221, MCA

IMP: 75-10-204, 75-10-221, MCA

REASON: Existing (10)(a), concerning specific geologic information for Class II disposal facilities, is redundant and specifies requirements similar to the proposed requirements for the soils and hydrologic study required at Class II facilities in New Rule XLV. It is therefore being proposed for deletion.

Existing (10)(b), concerning geologic information at transfer stations and Class III and Class IV disposal facilities, would become redundant because proposed New Rule XLV would require applicants for all types of facilities to submit adequate geologic information for department evaluations. It is therefore being proposed for deletion.

Existing (10)(c), concerning the ground water monitoring plan or no-migration demonstration for Class IV facilities, would become duplicative with the proposed adoption of New Rule XXIX, concerning operation and maintenance of Class IV facilities. It is therefore being proposed for deletion.

The recommended minimum scales proposed to be added for each type of map in new (1)(n) through (q) would provide appropriate detail for site evaluation and are common scales for maps obtainable from the U.S. Geological Survey. The maps are necessary for the department to evaluate potential environmental impacts to surrounding properties and the controls necessary to protect the environment.

Proposed new (1)(x) would clarify that only applicants for Class II and Class IV landfill facilities, and Class III facilities for which the sole or primary purpose is the storage, treatment, processing, or disposal of waste tires, must provide a copy of a financial assurance mechanism. Such Class III facilities are required by 75-10-216(1), MCA, to have financial assurance.

Section (14) would be deleted because there is no reason why applicants for only Class II facilities should be required to submit technical specifications and detailed drawings for department evaluation of potential environmental impacts. The other types of facilities should have their technical specifications and drawings reviewed also for evaluation of potential environmental impacts. Existing (14)(a) through (m) would be replaced by equivalent design requirements proposed in New Rule XXXIV.

Applicants would be required by new (1)(y) to provide a copy of the proposed deed notation indicating that a facility was used for waste disposal. The applicant would need to obtain approval of the deed notation as part of the license application review process so that the proper notation would be recorded by the licensee prior to the acceptance of waste at the facility. See New Rule XXIV. The department has experienced problems with licensees failing to record deed notations at closure of landfills and has been forced to litigate to require land owners to record notations. This is wasteful of the department's resources and could lead to a person buying a former landfill property without being fully aware that the land contains a landfill. It is

simpler and wiser to require an owner to record a notation when the owner has an incentive to do so. Then, the owner would be able to accept waste and receive payment for doing so only after a notation has been recorded.

Proposed new (1)(z) would require an applicant to submit demonstrations for facilities where airport safety, floodplains, wetlands, fault areas, seismic areas, and unstable areas affect the location or operation of the facility. This is necessary because these demonstrations are required in New Rules IV through IX and it is necessary to have these demonstrations made as part of the application so that these issues can be considered as part of the licensing process.

New (1)(aa), which would authorize the department to require other information in a license application if necessary to protect human health or the environment, is necessary because circumstances or knowledge not contemplated at the time the rule was drafted may be relevant to the protection of human health or the environment, and the department needs the authority to be able to require additional information.

An applicant would be required by new (2) to submit, with a license application, a copy of a policy of liability insurance for sudden accidental occurrences at the facility. It is important that a licensee demonstrate that it will have insurance coverage for bodily injury or property damages to ensure the financial health of the facility. Solid waste management facilities can be dangerous places with trucks and other heavy machinery in close proximity to small vehicles and people unloading refuse. A claim made against a facility that has no or inadequate insurance could jeopardize the financial stability of the facility and interfere with its ability to comply with these rules. The owner would be required under New Rule XXV to provide proof that a policy is in effect before waste could be accepted.

17.50.509 OPERATION AND MAINTENANCE PLAN REQUIREMENTS

(1) remains the same.

(2) The operation and maintenance plan required in ARM 17.50.508 shall must include:

(a) through (f) remain the same.

(g) types of waste the proposed facility will accept; ~~and~~

(h) a plan for reclamation closure of the disposal facility and the land's ultimate use as required under ARM ~~17.50.530~~. Title 17, chapter 50, [NEW SUBCHAPTER V];

(i) any methane monitoring plans required under ARM ~~17.50.544~~ Title 17, chapter 50, [NEW SUBCHAPTER II];

(j) any ground water monitoring plan required under ARM ~~17.50.701, et seq.~~ Title 17, chapter 50, [NEW SUBCHAPTER IV]; and

(k) any plans required for ~~composting or for~~ handling of special waste streams including, but not limited to:

(i) compostable materials;

(ii) contaminated soil;

(iii) asbestos-contaminated material;

(iv) biosolids;

(v) infectious wastes; or

(vi) any other special waste determined by the department to require a handling plan to protect human health or the environment;

(l) any other plans or information on alternative daily cover required in ARM Title 17, chapter 50, [NEW SUBCHAPTER II]; and

(m) any other plans or information determined by the department to be necessary to protect human health or the environment.

(3) An owner, operator, or licensee of a solid waste management system shall review the operation and maintenance plan every five years after the date of the issuance of the solid waste management system license to determine if significant changes in conditions or requirements have occurred. If the review indicates that significant changes have occurred, the owner, operator, or licensee shall update the operation and maintenance plan to reflect changed conditions and requirements, and submit the update to the department for approval. If the review indicates that significant changes have not occurred, the owner, operator, or licensee shall notify the department in writing that an update of the operation and maintenance plan is not necessary.

(4) An owner, operator, or licensee of a solid waste management system shall update the operation and maintenance plan to reflect changed conditions and requirements, and submit the update to the department for approval within 45 days after the department has mailed written notice that an update is necessary to protect human health or the environment. The department may approve a longer period to submit the update if requested by the owner, operator, or licensee.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: Subsections (2)(h) through (j) are being proposed for amendment to update citations.

New (2)(k)(i) through (vi) are being proposed to be added to require plans for handling of special waste streams because these types of wastes require special handling and it is necessary to set out the plans as part of an operation and maintenance (O & M) plan. The operator needs to give the management of these waste streams sufficient consideration and the department needs to review those plans to determine whether they adequately protect human health and the environment.

Proposed new (2)(l), concerning alternative daily cover, is necessary to conform this rule to New Subchapter II.

New (2)(m) is proposed to clarify that the department may require additional information or plans if it determines that they are necessary to protect human health and the environment. The reasons for this were discussed in the statement of reasonable necessity for ARM 17.50.508.

Proposed new (3) would require an owner, operator, or licensee to review the operation and maintenance (O & M) plan for a solid waste management system every five years to determine if significant changes have occurred. If significant changes have occurred, then the licensee, owner, or operator would be required to update the O & M plan and submit it to the department for approval. This is necessary because solid waste management is not a static activity, and the

originally-approved O & M plan can become outdated and may require revision when circumstances or requirements change at the facility. In five years much can change, so it is reasonable to require the owner, operator, or licensee to review it at least that frequently to determine if an update is necessary.

Proposed new (4) would require an owner, operator, or licensee to update the O & M plan for a solid waste management system within 45 days after the department has mailed written notice that the update is necessary to protect human health or the environment. The department would be able to approve a longer period in response to an extension request. This is necessary because circumstances or requirements at a facility could change to the point that the department believes an updated plan is necessary to protect human health or the environment before five years have elapsed. It is reasonable for the owner or operator to be required to submit an update within 45 days after being requested to do so. The department believes that 45 days generally would be sufficient time for the update to be prepared and submitted. However, the department believes that additional time for an update may be reasonable if requested and justified by an owner or operator. This may be necessary for publicly-owned landfills because public entities may not be able to prepare an update within 45 days because they must provide public notification and hold hearings before making decisions, approve a budget, and then authorize the consultant to proceed. These activities can take longer than 45 days.

17.50.513 PROCESSING OF SOLID WASTE MANAGEMENT SYSTEM LICENSE APPLICATION (1) The department ~~will~~ shall review each submitted license application within 60 days to insure that ensure that it is completed complete, as defined in Title 75, chapter 1, part 2, MCA. The department shall notify the local health officer of an application, as required in 75-10-222, MCA.

(2) ~~If additional information is required an application submitted pursuant to ARM 17.50.508 is incomplete, the department will~~ shall notify the applicant in writing within 15 days after the initial review is completed and ~~will~~ shall postpone processing the application until the additional information requested material necessary to complete the application is received and the application is determined to be complete. If the requested additional information is not received within 90 days after the applicant has been notified, a new application and application fee must be submitted. The department shall notify the applicant when an application is determined to be complete.

(2) (3) ~~Within 15 days after receipt of the completed application, the department shall notify in writing the local health officer in the county where the proposed solid waste management system will be located. The department shall review the completed a complete application and other relevant information and make a proposed decision based on the applicant's apparent ability to comply with the act and this subchapter applicable laws and rules, and determine the need for an environmental impact statement (EIS). To ensure a timely completion of the environmental review process, the department shall follow the time limits listed in (3)(a) through (c). All time limits are measured from the date the department receives a complete application. The department has:~~

(a) 60 days to complete a public scoping process, if any;

(b) 90 days to complete an environmental review unless a detailed statement pursuant to 75-1-201, MCA, is required; and

(c) 180 days to complete a detailed statement pursuant to 75-1-201, MCA.

(4) If the department is unable to complete an environmental review within the time provided in (3), it may extend the time limits in (3) by notifying the applicant in writing that an extension is necessary and stating the basis for the extension. The department may extend the time limit one time, and the extension may not exceed 50% of the original time period listed in (3). After one extension, the department may not extend the time limit unless the department and the applicant mutually agree to the extension.

(3) (5) A public notice will then be prepared by the department to explain its proposed decision. It shall be circulated in the following manner: one copy to the applicant, and 3 copies shall be mailed to the public health officer along with instructions that they be posted at the nearest post office and 2 other public buildings serving the geographical area of the proposed system. At least 1 news release shall be prepared and sent by the department to an area newspaper. The department has adopted rules relating to the Montana Environmental Policy Act (MEPA) in ARM Title 17, chapter 4, subchapter 6. The environmental review process for the department's proposed action must follow these rules.

(4) (6) The purpose of the public notice is to inform the public and seek their views on the proposed license. The notice shall state the name and address of the applicant, the proposed location of the solid waste management facility, and the department's proposed decision. The public shall be informed that it has 30 days from the date of the public notice to submit written comments to the department concerning the license application. Interested persons may obtain copies of the completed complete application and the department's environmental assessment or EIS, proposed decision, and final decision upon request, by enclosing the and payment of copying costs. The requirements of ARM Title 17, chapter 4, subchapter 6, apply to any public notice or public meetings concerning an environmental assessment or EIS.

(5) (7) After the comment period has expired Within 30 days after completing its environmental review under (3), the department will shall make its final decision and then notify in writing the applicant, the local health officer, the applicant and any other interested persons who have requested to be notified. If the department decides to issue the license, the requirements of 75-10-222 and 75-10-223, MCA, apply to validation of the license by the local health officer has up to 15 days within which to validate the license with his signature. If he refuses to validate the license, he must notify the department, the applicant and any other interested persons in writing. His decision must be based only on whether the application complies with the act and this subchapter.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: The existing rule was first adopted in 1972 and amended in 1974 and 1977. The subchapter has not been amended since 1977. The department adopted new rules to implement the Montana Environmental Policy Act (MEPA) in

1989, and in 2001, the Legislature put limits on the time allowed to process applications. These proposed amendments are necessary to update the rule to conform to the department rules concerning MEPA and the current requirements of the law.

The proposed amendments to (1), which require that the department conduct a completeness review of applications and public scoping, if needed, within 60 days, are necessary to ensure that the time limits of Title 75, chapter 1, part 2, MCA, are met. If an application is complete, the department has 90 days under 75-1-208, MCA, to complete an environmental assessment (EA). The proposed amendments to (1), which require the department to review applications, notify the applicant of additional information needed, and require that applicants pay an additional fee if they do not respond in a timely manner to the department's request for additional information, are necessary to ensure timely processing of applications and timely response from applicants.

The proposed amendments to (3), which require the department to complete an EA within the time required by law, are necessary to ensure that timely responses to complete applications are made. One of the purposes of an EA is to determine whether an EIS is necessary, and the proposed amendment would allow the department to make the determination and prepare an EIS within the time required by law. MEPA, at 75-1-208(5), MCA, allows the department to take an additional 50% of the time provided to complete its environmental review if necessary, and an additional time if agreed to by the applicant. Section (4) would adopt the same approach.

The proposed amendments to (5) and (6), which concern public notification of a proposed licensing decision, would clarify those sections, but do not change their meaning. The department is proposing to amend the rule to delete some of the text, and, instead, reference the laws or rules that contain the relevant requirements.

The proposed amendments to (7) would reference the statutory requirements (75-10-222 and 75-10-223, MCA) concerning the notification, validation, and refusal of validation of the local health officer. The proposed amendments are necessary because the language proposed to be deleted does not include all of the requirements contained in the referenced statutes. By deleting the incomplete language and referencing relevant statutes and rules, the regulated community would have a more complete statement of the application review process.

5. The proposed new rules provide as follows:

NEW RULE I CLASS II LANDFILL UNIT RESEARCH, DEVELOPMENT, AND DEMONSTRATION PLANS (1) Except as provided in (6), the department may approve a research, development, and demonstration plan included as a condition in the license for a new Class II landfill unit, existing Class II landfill unit, or lateral expansion of that unit, for which the licensee proposes to utilize innovative and new methods that vary from either or both of the following criteria if the Class II landfill unit has a leachate collection system designed and constructed to maintain less than a 30-centimeter depth of leachate on the liner:

- (a) the run-on control systems in [NEW RULE XX(1)]; and
- (b) the liquids restrictions in [NEW RULE XXII(1)].

(2) The department may approve a research, development, or demonstration plan for a new Class II landfill unit, existing Class II landfill unit, or lateral expansion of that unit, for which the licensee proposes to utilize innovative and new methods which vary from the final cover criteria of [NEW RULE XLIX(1)(a), (1)(b), and (2)(a)], provided the licensee demonstrates that the infiltration of liquid through the alternative cover system will not cause contamination of ground water or surface water, or cause leachate depth on the liner to exceed 30 centimeters.

(3) Any plan approved under this rule must include terms and conditions that are at least as protective as the criteria for Class II landfill units to assure protection of human health and the environment. Such plans must:

(a) provide for the construction and operation of such landfill units for not longer than three years, unless renewed pursuant to (5);

(b) provide that the Class II landfill unit may receive only those types and quantities of municipal solid waste and nonhazardous wastes that the department determines appropriate for the purposes of determining the efficacy and performance capabilities of the technology or process;

(c) include requirements as necessary to protect human health and the environment, including such requirements as necessary for testing and providing information to the department with respect to the operation of the landfill facility;

(d) require the owner or operator of a Class II landfill unit licensed under this rule to submit an annual report to the department showing whether and to what extent the site is progressing in attaining project goals. The report must include a summary of all monitoring and testing results, and any other operating information required by the department in the license; and

(e) require compliance with all applicable criteria in ARM Title 17, chapter 50, subchapters 4 through [NEW SUBCHAPTER V], except as approved under this rule.

(4) The department may order an immediate termination of all operations at the facility allowed under this rule or other corrective measures at any time the department determines that the overall goals of the project are not being attained, including protection of human health or the environment.

(5) An applicant for renewal of a plan approved under this rule shall include with its application for renewal a detailed assessment of the progress in achieving project goals, a list of problems and status with respect to problem resolution, and any other information or submittal that the department determines necessary to protect human health or the environment.

(6) The term of a plan approved under this rule may not exceed three years, and that of a renewal of an approved plan may not exceed three years.

(7) The total term for an approved plan for a project including renewals may not exceed 12 years.

(8) A licensee of a Class II facility operating under the small community exemption pursuant to [NEW RULE XXXII] is not eligible for a variance, as provided by this rule, from [NEW RULE XX(1)] and [NEW RULE XXII(1)].

(9) A licensee of a Class II facility that disposes of 20 tons of municipal solid waste per day or less, based on an annual average, is not eligible for a variance from [NEW RULE XLIX(2)(a)], except in accordance with [NEW RULE XLIX(3)].

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: The federal standards for research, development, and demonstration of municipal solid waste landfill (MSWLF) units are provided in 40 CFR 258.4. The proposed rule would allow the department to approve alternative designs and operational practices to further research and development goals. Research and development is necessary to test new ideas to better design and operate landfills.

The proposed rule provides that a license for a research and development unit may be issued only for a new Class II landfill unit, existing Class II landfill unit, or lateral expansion of that unit, designed and constructed with a leachate collection system that maintains no more than 30-centimeters depth of leachate on the liner. EPA has determined that the requisite demonstration of no increased risk to human health and the environment cannot be made unless the landfill unit is constructed with a leachate collection system designed to maintain no more than a 30-centimeter depth of leachate.

The proposed rule follows the EPA requirements with the exception of minor language changes for conformity with department practices. For instance, the department issues licenses and approvals, not permits, for solid waste management facilities.

NEW RULE II GENERAL PROVISIONS (1) All applicants, licensees, owners, and operators of solid waste management systems and facilities shall comply with this subchapter, except as otherwise specifically provided in this subchapter. Wherever there is a requirement imposed on an owner or operator in this subchapter, the licensee also shall comply with that requirement.

(2) Whenever a person, including an applicant or owner or operator, is required by this subchapter to submit a document for department approval of an action, the person may not take that action unless the person first submits a document containing all information necessary for the department to determine whether the action complies with the requirements of this subchapter and obtains department approval.

(3) When authorized by a court order or an agreement between the department and a landowner on whose property a violation of Title 75, chapter 10, part 2, MCA, or this subchapter has occurred, the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or this subchapter.

(4) Whenever the department determines under this subchapter that any information, submittal, plan, factor, procedure, condition, criterion, requirement, or change is necessary to protect human health or the environment, it shall mail notification of the determination to the appropriate applicant, owner, operator, or licensee.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE III DEFINITIONS In this subchapter, the following definitions

apply:

(1) "100-year flood" means a flood that has a one percent or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.

(2) "Airport" means public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(3) "Active portion" means that part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with [NEW RULE XLIX].

(4) "Aquifer" means any geologic formation, group of formations, or part of a formation capable of yielding significant quantities of ground water to wells or springs.

(5) "Areas susceptible to mass movement" means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the Class II or lined Class IV landfill unit, because of natural or artificially-caused events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

(6) "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

(7) "Class II landfill facility" has the meaning given in ARM 17.50.504.

(8) "Class III landfill facility" has the meaning given in ARM 17.50.504.

(9) "Closure" has the meaning given in ARM 17.50.502.

(10) "Department" has the meaning given in ARM 17.50.502.

(11) "Destruction or adverse modification" means a direct or indirect alteration of critical habitat that appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.

(12) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

(13) "Disposal" has the meaning given in 75-10-203, MCA.

(14) "Endangered or threatened species" means any species listed as such pursuant to section 4 of the federal Endangered Species Act of 1973.

(15) "Existing disposal unit" has the meaning given in ARM 17.50.502.

(16) "Facility" has the meaning given in ARM 17.50.502.

(17) "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

(18) "Floodplain" means the lowland and relatively flat areas adjoining inland and coastal waters, including flood prone areas of offshore islands, that are inundated by the 100-year flood.

(19) "Ground water" has the meaning given ARM 17.50.502.

(20) "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

(21) "Karst terranes" means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic

physiographic features present in karst terranes include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

(22) "Landfill" has the meaning given in ARM 17.50.502.

(23) "Lateral expansion" has the meaning given in ARM 17.50.502.

(24) "Leachate" has the meaning given in ARM 17.50.502.

(25) "Licensee" has the meaning given in ARM 17.50.502.

(26) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This definition does not include artificial materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(27) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

(28) "Operator" has the meaning given in ARM 17.50.502.

(29) "Owner" has the meaning given in ARM 17.50.502.

(30) "Poor foundation conditions" means those areas where features exist that indicate that a natural or artificially-caused event may result in inadequate foundation support for the structural components of a Class II or lined Class IV landfill unit.

(31) "Post-closure care" has the meaning given in ARM 17.50.502.

(32) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

(33) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

(34) "Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10g in 250 years.

(35) "Solid waste management system" has the meaning given in 75-10-203, MCA.

(36) "Structural components" means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of a Class II or lined Class IV landfill unit that is necessary for protection of human health and the environment.

(37) "Taking" means harassing, harming, pursuing, hunting, wounding, killing, trapping, capturing, or collecting or attempting to engage in such conduct.

(38) "Unit" has the meaning given in ARM 17.50.502.

(39) "Unstable area" means a location that is susceptible to natural or artificially-caused events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and Karst terranes.

(40) "Washout" means the carrying away of solid waste by waters of the base flood.

(41) "Wetlands" has the meaning given in 40 CFR 232.2.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE IV AIRPORT SAFETY (1) The owner or operator of a new or existing Class II landfill unit, or a lateral expansion of that unit, that is located within 10,000 feet (3,048 meters) of any airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any airport runway end used by only piston-type aircraft shall submit for department approval a demonstration that the unit is designed and operated so that the landfill unit does not pose a bird hazard to aircraft. For a new Class II landfill unit, or a lateral expansion of that unit, the demonstration must be submitted with the application for license. For an existing Class II landfill unit for which the demonstration has not been submitted and approved, the owner or operator shall submit the demonstration to the department for approval within 60 days after being requested to do so by the department.

(2) The owner or operator shall place the demonstration required in (1) in the operating record and notify the department that it has been placed in the operating record.

(3) An owner or operator proposing to site a new Class II landfill unit, or lateral expansion of that unit, within a five-mile radius of any airport runway end used by turbojet or piston-type aircraft shall notify the manager of the affected airport and the Federal Aviation Administration (FAA) of the proposal.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE V FLOODPLAINS (1) The owner or operator of a new or existing Class II or lined Class IV landfill unit, or a lateral expansion of that unit, located in a 100-year floodplain shall submit for department approval a demonstration that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator shall place the approved demonstration in the operating record and notify the department that it has been placed in the operating record.

(2) For a new Class II or lined Class IV landfill unit, or a lateral expansion of that unit, the demonstration in (1) must be submitted with the application for a license. For an existing Class II or lined Class IV landfill unit for which the demonstration has not been submitted and approved, the owner or operator shall submit the demonstration to the department for approval within 45 days after being requested to do so by the department.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE VI WETLANDS (1) A new Class II or lined Class IV landfill unit, or a lateral expansion of that unit, may not be located in wetlands, unless the owner

or operator submits to the department for approval the following demonstrations:

(a) when applicable under 33 USC 1344 (Section 404 of the Federal Clean Water Act, as amended) or applicable Montana wetlands laws, clear rebuttal of the presumption that a practicable alternative to the proposed landfill is available that does not involve wetlands;

(b) the construction and operation of a Class II or lined Class IV landfill unit will not:

(i) cause or contribute to violations of any applicable Montana water quality standard;

(ii) violate any applicable toxic effluent standard or prohibition under 33 USC 1317 (Section 307 of the Federal Clean Water Act, as amended);

(iii) jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under 16 USC 1531 through 1544 (the Endangered Species Act of 1973, as amended); or

(iv) violate any requirement under 33 USC 1401 through 1447(f) (the Marine Protection, Research, and Sanctuaries Act of 1972, as amended) for the protection of a marine sanctuary;

(c) the Class II or lined Class IV landfill unit will not cause or contribute to significant degradation of wetlands. The owner or operator shall demonstrate the integrity of the Class II or lined Class IV landfill unit and its ability to protect ecological resources, by addressing the following factors:

(i) erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the Class II or lined Class IV landfill unit;

(ii) erosion, stability, and migration potential of dredged and fill materials used to support the Class II or lined Class IV landfill unit;

(iii) the volume and chemical nature of the waste managed in the Class II or lined Class IV landfill unit;

(iv) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(v) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(vi) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected;

(d) to the extent required under 33 USC 1344 (Section 404 of the Federal Clean Water Act, as amended) or applicable Montana wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands, as defined by acreage and function, by first avoiding impacts to wetlands to the maximum extent practicable as required by (1)(a), then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions, e.g., restoration of existing degraded wetlands or creation of artificial wetlands; and

(e) sufficient information is available to make a reasonable determination with respect to these demonstrations.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE VII FAULT AREAS (1) A new Class II or lined Class IV landfill unit or a lateral expansion of that unit may not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator submits to the department for approval a demonstration that an alternative setback distance of less than 200 feet (60 meters) will prevent damage to the structural integrity of the Class II or lined Class IV landfill units and will be protective of human health and the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE VIII SEISMIC AREAS (1) A new Class II or lined Class IV landfill unit or a lateral expansion of that unit may not be located in a seismic impact zone, unless the owner or operator submits to the department for approval a report prepared by a Montana licensed professional engineer demonstrating that all landfill containment structures including, but not limited to, the landfill liner, leachate collection and removal system, gas control system, landfill final cover, and surface water control system, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. An owner or operator of an existing Class II or lined Class IV landfill unit shall, within 45 days after being requested by the department to do so, submit to the department for approval the report required in the previous sentence. The owner or operator shall place the approved report in the operating record and notify the department that it has been placed in the operating record.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE IX UNSTABLE AREAS (1) An applicant for a license for a new Class II or lined Class IV landfill unit or a lateral expansion of that unit located in an unstable area shall submit to the department for approval, with the application, a report prepared by a Montana licensed professional engineer demonstrating that the unit is designed to ensure that the integrity of the structural components of the unit will not be disrupted. An owner or operator of an existing Class II or lined Class IV landfill unit shall, within 45 days after being requested by the department to do so, submit to the department for approval the report required in the previous sentence. The owner or operator shall place the approved report in the operating record and notify the department that it has been placed in the operating record. When determining whether an area is unstable, the owner or operator shall consider the following factors, and any other factor determined by the department to be necessary to protect human health or the environment:

(a) on-site or local soil conditions that may result in significant differential settling;

(b) on-site or local geologic or geomorphologic features; and

(c) on-site or local artificial features or events, both surface and subsurface.

AUTH: 75-10-204, MCA
IMP: 75-10-204, MCA

NEW RULE X CLOSURE OF NONCONFORMING LANDFILLS (1) The owner or operator of an existing Class II or lined Class IV landfill unit that does not submit a demonstration specified in [NEW RULE IV(1)], pertaining to airports, [NEW RULE V(2)], floodplains, [NEW RULE VIII(1)], seismic areas, or [NEW RULE IX(1)], unstable areas, within the period specified in those rules, shall commence closure as required in [NEW SUBCHAPTER V] within 90 days after the period to submit the demonstration expires. If the department notifies an owner or operator by mail that it has not approved a demonstration identified in the previous sentence, the owner or operator shall commence closure as required in [NEW SUBCHAPTER V] within 90 days after the notification was mailed.

AUTH: 75-10-204, MCA
IMP: 75-10-204, MCA

NEW RULE XI LOCATION RESTRICTIONS (1) The owner or operator of a landfill facility shall comply with the following general locational requirements:

- (a) a sufficient amount of land must be available to satisfy the approved design, operation, and capacity of any solid waste management system, including adequate separation of wastes from underlying ground water or adjacent surface water;
- (b) local roads must be capable of providing access in all weather conditions and local bridges must be capable of supporting vehicles with maximum rated loads;
- (c) the facility must be located in a manner that does not allow the discharge of pollutants in excess of state standards for the protection of state waters, public water supply systems, or private water supply systems. The department may, if necessary to protect human health or the environment, impose additional conditions on a facility in or near sensitive hydrogeological environments including, but not limited to, sole-source aquifers, wellhead protection areas, or gravel pits;
- (d) drainage structures must be installed to control surface water run-off from waste management areas and prevent surface water run-on into waste management areas;
- (e) the facility must be located to allow for closure, post-closure care, and planned uses of the land after the post-closure period;
- (f) the facility must manage solid waste, gas, and leachate pursuant to subchapters 4 and 5 and [NEW SUBCHAPTERS I through V];
- (g) the facility or practices may not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife;
- (h) a Class III landfill may not be located on the banks of or in a perennial, intermittent, or ephemeral stream, water saturated area, such as a marsh or deep gravel pit that contain exposed ground water, or wetland, unless the owner or operator submits to the department for approval the demonstrations required in [NEW RULE VI] to the same extent as required for a Class II or Class IV landfill unit;
- (i) the facility or solid waste management activity may not result in the destruction or adverse modification of the critical habitat of endangered or

threatened species, as identified in 50 CFR Part 17; and

(j) any other locational requirement determined by the department to be necessary to protect human health or the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: Proposed New Rules II through XI would comprise New Subchapter I. The department is proposing the repeal of the existing solid waste program landfill location rules and the adoption of a new subchapter. The proposed new rules are equivalent to the existing landfill location rules.

The reasons for New Rule II are the same as set forth in the statement of reasonable necessity for ARM 17.50.501(3), (4) and (5).

New Rules VIII and IX, concerning areas with seismic activity or that are unstable, would make two changes to the federal regulatory scheme that they parallel. New Rule VIII(1) would add the requirement that a report by a professional engineer, stating that the landfill containment structures were designed to withstand local seismic conditions, be submitted by an applicant for a new Class II or lined Class IV landfill unit or lateral expansion of that unit, or, by an owner or operator of an existing disposal unit, within 45 days after being requested to do so by the department. New Rule IX(1) would add a requirement that an applicant for a license for a new Class II or lined Class IV landfill unit, or lateral expansion of that unit, in an unstable area submit, with the application, a report on stability by a professional engineer. New Rule IX(1) also would require that an owner or operator of an existing Class II or lined Class IV landfill unit, or lateral expansion of that unit, in an unstable area submit a report on stability by a professional engineer, within 45 days after being requested to do so by the department. The reports must be prepared by a professional engineer because only such a person is qualified to determine whether the containment structures are designed to withstand predicted local seismic activity. Similarly, only a professional engineer is qualified to address stability.

The department is proposing a new version of existing ARM 17.50.505(1)(g) in New Rule XI(1)(e). ARM 17.50.505 is proposed to be repealed. The department is proposing to replace the phrase "reclamation and reuse of the land" in the existing rule with "closure, post-closure care, and planned uses of the land after the post-closure period." The phrases have similar meanings, but the proposed new phrase more precisely requires that the facility be located to allow for the uses that are planned for the post-closure period and afterward. The current language can be interpreted to allow location for any use.

The department is proposing in New Rule XI(1)(c) and (j) to adopt language allowing it to require additional information if necessary to protect human health or the environment. The reason for this is the same as that described for the amendment to ARM 17.50.508.

NEW RULE XII GENERAL PROVISIONS (1) All applicants, licensees, owners, and operators of solid waste management systems and facilities shall comply with this subchapter, except as otherwise specifically provided in this

subchapter. Wherever there is a requirement imposed on an owner or operator in this subchapter, the licensee also shall comply with that requirement.

(2) Whenever a person, including an applicant or owner or operator, is required by this subchapter to submit a document for department approval of an action, the person may not take that action unless the person first submits a document containing all information necessary for the department to determine whether the action complies with the requirements of this subchapter and obtains department approval.

(3) When authorized by a court order or an agreement between the department and a landowner on whose property a violation of Title 75, chapter 10, part 2, MCA, or this subchapter has occurred, the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or this subchapter.

(4) Whenever the department determines under this subchapter that any information, submittal, plan, factor, procedure, condition, criterion, requirement, or change is necessary to protect human health or the environment, it shall mail notification of the determination to the appropriate applicant, owner, operator, or licensee.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XIII DEFINITIONS In this subchapter, the following definitions apply:

(1) "Active life" has the meaning given in ARM 17.50.502.

(2) "Active portion" means that part of a facility or unit that has received or is receiving wastes and that has not been closed in accordance with [NEW RULE XLIX].

(3) "Aquifer" means any geologic formation, group of formations, or part of a formation capable of yielding significant quantities of ground water to wells or springs.

(4) "Class II landfill facility" has the meaning given in ARM 17.50.504.

(5) "Class III landfill facility" has the meaning given in ARM 17.50.504.

(6) "Class IV landfill facility" has the meaning given in ARM 17.50.504.

(7) "Closure" has the meaning given in ARM 17.50.502.

(8) "Conditionally exempt small quantity generator wastes" means wastes from a generator defined in 40 CFR 261.5.

(9) "Department" has the meaning given in ARM 17.50.502.

(10) "Disease vectors" means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.

(11) "Existing disposal unit" has the meaning given in ARM 17.50.502.

(12) "Facility" has the meaning given in ARM 17.50.502.

(13) "Gas condensate" means the liquid generated as a result of a gas recovery process at a Class II landfill unit.

(14) "Ground water" has the meaning given ARM 17.50.502.

(15) "Group II waste" has the meaning given in ARM 17.50.503.

(16) "Household waste" means any solid waste, including garbage, trash,

and sanitary waste in septic tanks, derived from households, including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

(17) "Landfill" has the meaning given in ARM 17.50.502.

(18) "Lateral expansion" has the meaning given in ARM 17.50.502.

(19) "Leachate" has the meaning given in ARM 17.50.502.

(20) "Liquid waste" means any waste material that is determined to contain "free liquids," as defined by Method 9095B (Paint Filter Liquids Test), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA publication no. SW-846).

(21) "Lower explosive limit" means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25° C and atmospheric pressure.

(22) "Open burning" means the combustion of solid waste without:

(a) control of combustion air to maintain adequate temperature for efficient combustion;

(b) containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

(c) control of the emission of the combustion products.

(23) "Operator" has the meaning given in ARM 17.50.502.

(24) "Owner" has the meaning given in ARM 17.50.502.

(25) "Post-closure care" has the meaning given in ARM 17.50.502.

(26) "Regulated hazardous waste" has the meaning given in ARM 17.50.502.

(27) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

(28) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

(29) "Transfer station" means a solid waste management facility that can have a combination of structures, machinery, or devices, where solid waste is taken from collection vehicles (public, commercial, or private) and placed in other transportation units for movement to another solid waste management facility.

(30) "Unit" has the meaning given in ARM 17.50.502.

(31) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within a facility's property boundary.

(32) "Wetlands" has the meaning given in 40 CFR 232.2.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XIV PROCEDURES FOR EXCLUDING THE RECEIPT OF HAZARDOUS WASTE (1) The owner or operator of a Class II landfill unit shall implement a program at the facility for detecting and preventing the disposal of regulated hazardous waste, as defined in 40 CFR part 261 and polychlorinated biphenyls (PCB) waste, as defined in 40 CFR part 761. This program must include, at a minimum:

(a) random inspections of incoming loads, unless the owner or operator

takes other precautions to ensure that incoming loads do not contain regulated hazardous waste or PCB waste;

(b) maintaining records of any inspections;

(c) training of facility personnel to recognize regulated hazardous waste and PCB waste; and

(d) notification of the department if a regulated hazardous waste or PCB waste is discovered at the facility.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XV COVER MATERIAL REQUIREMENTS (1) Except as provided in (2), the owner or operator of a Class II landfill unit shall cover disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.

(2) The owner or operator shall submit for departmental approval procedures for use of any alternative daily cover materials and include those procedures in the operation and maintenance plan required in ARM 17.50.508 and 17.50.509. The following criteria also apply:

(a) the procedures for the use of alternative daily cover materials must provide for the application of six inches of approved cover soil at least once per week;

(b) the owner or operator shall demonstrate in the operation and maintenance plan that the material used in, and the thickness of, the alternative daily cover will control disease vectors, fires, odors, blowing litter, and scavenging, and minimize leachate without presenting a threat to human health or the environment; and

(c) the owner or operator of a Class II landfill unit for which some portion will not receive additional waste within 90 days shall place on that portion an intermediate cover of at least one foot of approved cover soil, unless the owner or operator has submitted for department approval a demonstration that there is good cause for not covering.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XVI DISEASE VECTOR CONTROL (1) The owner or operator of a Class II landfill unit shall prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XVII EXPLOSIVE GASES CONTROL (1) The owner or operator of a Class II landfill unit shall ensure that:

(a) the concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive limit for methane in facility structures, excluding gas control or recovery system components; and

(b) the concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.

(2) The owner or operator of a Class II landfill unit shall implement a routine methane monitoring program to ensure that the standards of (1) are met.

(3) The minimum frequency of monitoring required in (2) is quarterly, except as provided in (7). The type and frequency of monitoring required in (2) must be determined based on the following factors:

(a) soil conditions;

(b) the hydrogeologic conditions surrounding the facility;

(c) the hydraulic conditions surrounding the facility;

(d) the location of facility structures and property boundaries.

(4) If methane gas levels exceeding the limits specified in (1) are detected, the owner or operator shall:

(a) immediately take all necessary steps to ensure protection of human health and notify the department;

(b) within seven days after detection, place in the operating record specification of the methane gas levels detected and a description of the steps taken to protect human health; and

(c) within 60 days after detection, submit for department approval, and implement, a remediation plan for controlling methane gas releases, place a copy of the plan in the operating record, and notify the department that the plan has been implemented.

(5) The remediation plan in (4)(c) must:

(a) describe the nature and extent of the problem and the proposed remedy;

(b) provide design plans for the proposed remedy; and

(c) for construction of all methane gas control systems required in this rule, contain a submission for department approval that includes plans, specifications, reports, and certifications to the same extent as required in [NEW RULE XXXIV].

(6) The department may establish alternative schedules for demonstrating compliance with (4)(b) and (c).

(7) The department may establish alternative frequencies for the monitoring requirement of (3), after public review and comment, for an owner or operator of a Class II landfill unit that disposes of 20 tons or less of municipal solid waste per day, based on an annual average. Any alternative monitoring frequencies established under this paragraph must:

(a) be based on the unique characteristics of small communities;

(b) take into account climatic and hydrogeologic conditions; and

(c) be protective of human health and the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XVIII AIR CRITERIA (1) The owner or operator of a Class II landfill unit shall ensure that the unit does not violate any applicable requirements

developed under a State Implementation Plan (SIP) approved or promulgated by the EPA Regional Administrator pursuant to section 110 of the Clean Air Act, as amended, or any other applicable air quality requirements.

(2) Open burning of solid waste is prohibited at all Class II landfill units, except that infrequent burning of agricultural wastes, silvicultural wastes, land-clearing debris, diseased trees, or debris from emergency cleanup operations, may occur only in compliance with the solid waste facility's operation and maintenance plan and a permit obtained under ARM Title 17, chapter 8, part 6.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XIX ACCESS REQUIREMENTS (1) The owner or operator of a Class II landfill unit shall control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes, by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XX RUN-ON AND RUN-OFF CONTROL SYSTEMS (1) The owner or operator of a Class II landfill unit shall design, construct, and maintain:

- (a) a run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a 25-year storm; and
- (b) a run-off control system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(2) Run-off from the active portion of the landfill unit must be handled in accordance with [NEW RULE XXI(1)].

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXI SURFACE WATER REQUIREMENTS (1) A Class II landfill unit may not:

- (a) cause a discharge of a pollutant into state waters, including wetlands, that violates any requirement of the Montana Water Quality Act including, but not limited to, the Montana pollutant discharge elimination system (MPDES) or the requirements found in ARM Title 17, chapter 30, subchapter 13; or
- (b) cause the discharge from a nonpoint source of pollution to waters of the United States, including wetlands, that violates any requirement of an area-wide or statewide water quality management plan that has been approved under 33 USC 1288 or 1329 (section 208 or 319 of the Federal Clean Water Act, as amended).

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXII LIQUIDS RESTRICTIONS (1) Bulk or noncontainerized

liquid waste may not be placed in a Class II landfill unit unless approved in advance by the department, and:

- (a) the waste is household waste other than septic waste; or
- (b) the waste is leachate or gas condensate derived from the Class II landfill unit and the Class II landfill unit, whether it is a new or existing Class II landfill unit, or lateral expansion of that unit, is designed with a composite liner and leachate collection and removal system as described in [NEW RULE XXXIII(1)(b)]. The owner or operator shall submit a demonstration to the department that the waste would meet the requirements of this rule, place the demonstration in the facility operating record, and notify the department that it has been placed in the operating record.

(2) Containers holding liquid waste may not be placed in a Class II landfill unit unless:

- (a) the container is a small container similar in size to that normally containing household waste;
- (b) the container is designed to hold liquids for use other than storage; or
- (c) the waste is household waste.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXIII. RECORDKEEPING REQUIREMENTS (1) The owner or operator of a Class II landfill unit shall record and retain at the facility, in an operating record or in an alternative location approved by the department, the following information, as it becomes available:

- (a) any location restriction demonstration required under ARM Title 17, chapter 50, [NEW SUBCHAPTER I];
- (b) inspection records, training procedures, and notification procedures required in [NEW RULE XIV];
- (c) gas monitoring results and any remediation plans required by [NEW RULE XVII];
- (d) any Class II landfill unit design documentation for placement of leachate or gas condensate in a Class II landfill unit, as required under [NEW RULE XXII(1)(b)];
- (e) any demonstration, certification, finding, monitoring, testing, or analytical data required by ARM Title 17, chapter 50, [NEW SUBCHAPTER IV];
- (f) closure and post-closure care plans and any monitoring, testing, or analytical data as required by [NEW RULE XLIX] and [NEW RULE L];
- (g) any cost estimates and financial assurance documentation required by ARM 17.50.540; and
- (h) any information demonstrating compliance with the small community exemption, as required by [NEW RULE XXXII(2)].

(2) The owner/operator shall notify the department when a document listed in (1) has been placed in, or added to, the operating record, and all information contained in the operating record must be furnished upon request to the department or be made available at all reasonable times for inspection by the department.

(3) The department may set, and an owner or operator shall comply with,

alternative schedules for recordkeeping and notification requirements specified in (1) and (2), except for the notification requirements in [NEW RULE IV(2)] and [NEW RULE XLI(7)(a)(iii)].

(4) The department's regulatory program for solid waste does not include the requirements of 40 CFR Part 3, Electronic Reporting. Therefore, the owner or operator may not submit electronic documents to satisfy the requirements of subchapters 4 through [NEW SUBCHAPTER V].

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXIV DEED NOTATION (1) The following requirements concerning deed notations apply to a solid waste landfill facility:

(a) Before the initial receipt of waste at the facility or, if the facility is licensed and accepting waste on [THE EFFECTIVE DATE OF THIS RULE], by [60 DAYS AFTER THE EFFECTIVE DATE OF THIS RULE], the owner of the land where a facility is located shall submit for department approval a notation to the deed to that land, or to some other instrument that is normally examined during title search. The notation must be submitted to the department on a form provided by the department and must be accompanied by a certified exhibit of the waste boundary that references the certificate of survey for the tract that encloses the facility. The notation must, in perpetuity, notify any potential purchaser of the land that:

- (i) the land has been used as a solid waste management system; and
- (ii) its use is restricted under [NEW RULE L(3)(c)].

(b) If the department approves the notation and exhibit, it shall notify the owner by mail.

(c) Within ten days after the department mails the approval to the owner, the owner shall record that notation with the county clerk and recorder in the county where the property is located and place a copy of the recorded notation and the exhibit in the facility operating record.

(d) The land use restrictions in (1)(a)(ii) apply during the post-closure care period and in perpetuity thereafter and are binding on all successors and assigns.

(e) The owner of the land where a solid waste management system is located may modify the waste disposal perimeter identified in the exhibit accompanying the notation only by following the process in (1)(a) through (c).

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXV GENERAL LIABILITY INSURANCE (1) Before the initial receipt of waste at a solid waste management facility, or by [60 DAYS AFTER THE EFFECTIVE DATE OF THIS RULE] if the facility is accepting waste, the owner or operator shall submit for department approval, and maintain in force during the active life of the facility, a policy of general liability insurance to cover bodily injury or property damage to third persons caused by sudden accidental occurrences at the facility in the minimum amount of \$1 million per occurrence with a minimum annual aggregate of \$2 million. The owner or operator shall place a copy of the approved

policy in the facility operating record.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXVI SPECIAL WASTES (1) The owner or operator of a solid waste management facility shall manage the following special wastes according to the plan in ARM 17.50.509 and the following criteria:

(a) asbestos-contaminated material, 40 CFR part 61, subpart M, as adopted by reference in ARM 17.74.351;

(b) infectious wastes, Title 75, chapter 10, part 10, MCA; and

(c) any other special waste, in the manner determined by the department to be necessary to protect human health or the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXVII OPERATING CRITERIA (1) An owner or operator of a solid waste management system shall construct, maintain, and operate that system in conformance with the requirements of this subchapter, the plan of operation and maintenance approved by the department, all local zoning, system planning, building, and protective covenant provisions, and any other legal requirements that may be in effect.

(2) In addition to the requirements of ARM 17.50.509, the owner or operator of a solid waste management facility shall satisfy the following general operating requirements:

(a) all solid waste management must be confined to areas within the facility that can be effectively maintained and operated in compliance with this subchapter. The areas to which waste is confined must be created and maintained by supervision, fencing, signs, or similar means approved by the department;

(b) the owner or operator shall take effective measures to control litter at landfill facilities;

(c) salvaging of materials by the public is prohibited unless the owner or operator submits for department approval a demonstration that it can be done in a manner protective of human health and the environment;

(d) a resource recovery, recycling, or solid waste treatment facility and components must be designed, constructed, maintained, and operated to control litter, insects, rodents, odor, aesthetics, residues, wastewater, and air pollutants;

(e) a container at a transfer station used as part of a management system for Group II solid wastes must be maintained and kept in a sanitary manner and emptied at least once per week; and

(f) a solid waste management facility must be designed, constructed, and operated in a manner to prevent harm to human health and the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXVIII OPERATING CRITERIA FOR CLASS III LANDFILL

UNITS (1) The owner or operator of a Class III landfill unit:

- (a) may accept only Group III wastes;
- (b) shall cover the wastes at least every three months with not less than six inches of a department-approved cover soil;
- (c) may not place bulk or noncontainerized liquid waste in the unit;
- (d) shall comply, to the same extent required of a Class II landfill unit, with:
 - (i) [NEW RULE XVIII], pertaining to air quality;
 - (ii) [NEW RULE XIX], pertaining to access; and
 - (iii) [NEW RULE XX], pertaining to run-on and run-off control systems;
- (e) shall, if the unit has been licensed for the sole or primary purpose of storage, treatment, processing, or disposal of waste tires, comply with the recordkeeping requirements of [NEW RULE XXIII], the general requirements of 75-10-250, MCA, and the financial assurance requirements of 75-10-216, MCA; and
- (f) shall comply with the requirements of [NEW RULE XXIV], concerning a deed notation.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXIX OPERATING CRITERIA FOR CLASS IV LANDFILL

UNITS (1) The owner or operator of a Class IV landfill unit:

- (a) shall control litter, odor, aesthetics, wastewater, and leachate;
 - (b) shall apply an approved cover at least every three months unless more frequent cover is needed to control litter or minimize leachate;
 - (c) may not accept liquid paints, solvents, glues, resins, dyes, oils, pesticides, or any other household hazardous wastes. If these wastes have not been removed from buildings prior to demolition, the owner or operator of a Class IV landfill unit may not accept the wastes as demolition waste;
 - (d) shall provide cost estimates and financial assurance for closure and post-closure care to the same extent as required for a Class II landfill unit in ARM 17.50.540; and
 - (e) shall comply with the requirements of [NEW RULE XXIV] concerning a deed notation.
- (2) The owner or operator of a Class IV landfill unit shall comply, to the same extent required for a Class II landfill unit, with the:
- (a) waste screening requirements in [NEW RULE XIV];
 - (b) disease vector control requirements in [NEW RULE XVI];
 - (c) methane gas control requirements in [NEW RULE XVII];
 - (d) air criteria requirements in [NEW RULE XVIII];
 - (e) access requirements in [NEW RULE XIX];
 - (f) run-on and run-off control systems requirements as in [NEW RULE XX];
 - (g) surface water requirements in [NEW RULE XXI];
 - (h) bulk liquids requirements in [NEW RULE XXII];
 - (i) recordkeeping requirements in [NEW RULE XXIII]; and
 - (j) ground water monitoring requirements in ARM Title 17, chapter 50, [NEW SUBCHAPTER IV], unless the owner or operator obtains department approval of a

demonstration that there is no potential for migration of a constituent in Appendix I or II to 40 CFR part 258 (July 1, 2008) pursuant to ARM Title 17, chapter 50, [NEW SUBCHAPTER IV], or a demonstration that such monitoring is not required to protect human health and the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: Proposed New Rules XII through XXIX would comprise New Subchapter II. The department is proposing the repeal of the existing solid waste program landfill operation rules and the adoption of a new subchapter that contains new landfill operation rules. The proposed new rules are equivalent to the existing landfill operation rules.

The reasons for New Rule XII are the same as set forth in the statement of reasonable necessity for ARM 17.50.501(3), (4), and (5).

The definitions in New Rule XIII are being proposed for the same reasons as set forth above in the statement of reasonable necessity for the amendments to ARM 17.50.502.

New Rule XXVII(2) requires updates to operation and maintenance plans as required by ARM 17.50.509(3). The reason for the adoption of (3) is set forth in the statement of reasonable necessity for the adoption of ARM 17.50.509(3). New Rule XXVI(1)(c) is being proposed to allow the department to require management, as special waste, those wastes determined to require special treatment in order to protect human health or the environment. The reason for this is the same as that described for the amendment to ARM 17.50.508.

The department is proposing to require in New Rule XXIV that the owner or operator of a solid waste management facility record a deed notation before the initial receipt of waste and that a facility that has already begun receiving waste shall record a deed notation within 60 days after the rule's adoption. This is necessary for the same reasons provided for the amendment of ARM 17.50.508.

The department also is proposing to specify that a proposed deed notation must be submitted on a form supplied by the department and that the submission must include, as an exhibit, a certificate of survey. The reason for these requirements is to make sure that all necessary information will be supplied, and that a certificate of survey, prepared by a professional surveyor whose competence has been recognized by the state, is used as the reference in delineating the solid waste management facility boundaries.

The department is proposing to require that a deed notation give notice in perpetuity that the property was a solid waste management facility and that its use is subject to restrictions. This requirement is taken from the federal EPA's deed notation requirements in 40 CFR 258.60(i), which cover only Class II landfills. The department is proposing to require deed notations for all solid waste management facilities because the waste in all such facilities needs to be isolated from the environment and a potential purchaser should be able to determine that solid waste was managed on the property and that its use is restricted before purchasing the property.

The department is proposing to add language that the land use restrictions

referred to in the deed notation are binding during the post-closure period and in perpetuity and that they are binding on successors and assigns. The reason for these provisions is that the federal EPA language in 40 CFR 258.61 refers to only the post-closure period, which is normally 30 years. Waste in landfills can take much longer than 30 years to break down and must be isolated from the environment for longer. Therefore, it is necessary to have the land use restrictions remain in place for perpetuity. It is necessary for the rule to state that the restrictions are binding on successors and assigns because the department has been advised by the National Association of Attorneys General and an assistant Colorado attorney general that the courts in some states have not enforced the restrictions in deed notations because they are viewed as restraints on alienation of land, which are disfavored. To avoid such an interpretation, it is necessary to expressly state that the restrictions are binding on successors and assigns, which includes all future owners.

The department is proposing to require in New Rule XXV that the owner or operator of a solid waste management facility obtain an insurance policy before the initial receipt of waste and keep it in effect during the active life of the facility and that the owner or operator of a landfill facility that already has begun receiving waste shall obtain an insurance policy within 60 days after the rule's adoption. The policy must be one of general liability insurance to cover bodily injury or property damage to third persons caused by sudden accidental occurrences at the facility in the minimum amount of \$1 million per occurrence with a minimum annual aggregate of \$2 million. This is necessary for the same reasons provided for the amendment of ARM 17.50.508.

The department is proposing to add a requirement in New Rule XXVIII(1)(f) that would require recording of a deed notation for a Class III landfill facility before it can accept waste, or within 60 days after the rule becomes effective if the landfill already is accepting waste. The reason for this is the same as that set out in the reason for the amendments to ARM 17.50.508.

The department is proposing in New Rule XXIX(1)(d) and (e) that the owner or operator of a Class IV landfill facility obtain financial assurance pursuant to ARM 17.50.540 and record a deed notation pursuant to New Rule XXIV. This is necessary for the same reasons provided for the amendment of ARM 17.50.508. The requirement of financial assurance for Class IV landfill facilities is not new. This requirement currently is found in ARM 17.50.542, which is proposed to be repealed.

NEW RULE XXX GENERAL PROVISIONS (1) All applicants, licensees, owners, and operators of solid waste management systems and facilities shall comply with this subchapter, except as otherwise specifically provided in this subchapter. Wherever there is a requirement imposed on an owner or operator in this subchapter, the licensee also shall comply with that requirement.

(2) Whenever a person, including an applicant or owner or operator, is required by this subchapter to submit a document for department approval of an action, the person may not take that action unless the person first submits a document containing all information necessary for the department to determine whether the action complies with the requirements of this subchapter and obtains department approval.

(3) When authorized by a court order or an agreement between the department and a landowner on whose property a violation of Title 75, chapter 10, part 2, MCA, or this subchapter has occurred, the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or this subchapter.

(4) Whenever the department determines under this subchapter that any information, submittal, plan, factor, procedure, condition, criterion, requirement, or change is necessary to protect human health or the environment, it shall mail notification of the determination to the appropriate applicant, owner, operator, or licensee.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXXI DEFINITIONS In this subchapter, the following definitions apply:

- (1) "Active life" has the meaning given in ARM 17.50.502.
- (2) "Class II landfill facility" has the meaning given in ARM 17.50.504.
- (3) "Class IV landfill facility" has the meaning given in ARM 17.50.504.
- (4) "Closure" has the meaning given in ARM 17.50.502.
- (5) "Composite liner" means a system consisting of two components. The upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component.
- (6) "Department" has the meaning given in ARM 17.50.502.
- (7) "Existing disposal unit" has the meaning given in ARM 17.50.502.
- (8) "Facility" has the meaning given in ARM 17.50.502.
- (9) "Ground water" has the meaning given in ARM 17.50.502.
- (10) "Landfill" has the meaning given in ARM 17.50.502.
- (11) "Lateral expansion" has the meaning given in ARM 17.50.502.
- (12) "Leachate" has the meaning given in ARM 17.50.502.
- (13) "Leachate collection system" means an engineered structure, designed to collect leachate, that is located above a liner and below the waste in a landfill unit.
- (14) "Leachate removal system" means an engineered structure that allows for the removal of leachate from a landfill unit. A leachate removal system may be, but is not necessarily, used in conjunction with a leachate collection system.
- (15) "Operator" has the meaning given in ARM 17.50.502.
- (16) "Owner" has the meaning given in ARM 17.50.502.
- (17) "Remediation" means the act of reducing contamination to a level that is protective of human health and the environment.
- (18) "Unit" has the meaning given in ARM 17.50.502.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXXII SMALL COMMUNITY EXEMPTION (1) The owner or operator of a new Class II or Class IV landfill unit, existing Class II or Class IV landfill unit, or lateral expansion of that unit, that disposes of less than 20 tons of municipal solid waste daily, based on an annual average, is exempt from ARM Title 17, chapter 50, [NEW SUBCHAPTERS III and IV], if there is no evidence of ground water contamination from that unit, or lateral expansion of that unit, and the unit, or lateral expansion of that unit, serves:

(a) a community that experiences an annual interruption of at least three consecutive months of surface transportation that prevents access to a regional waste management facility; or

(b) a community that has no practicable waste management alternative and the landfill unit is located in an area that annually receives no more than 25 inches of precipitation. For the purposes of this rule, the lack of a practicable waste management alternative may be demonstrated by the following:

(i) there is no access to a licensed Class II landfill facility within 100 miles of the community; and

(ii) the cost per household of using an alternative disposal method, and the cost per household of complying with the requirements for landfill design and operation, distributed over the estimated active life of the landfill, will each exceed on an annual basis 1% of the median household income for the service area.

(2) The owner or operator of a new Class II or Class IV landfill unit, existing Class II or Class IV landfill unit, or lateral expansion of that unit, that meets the criteria in (1)(a) or (b) shall place in the operating record information demonstrating this.

(3) Within 14 days after obtaining knowledge of ground water contamination resulting from the unit for which the exemption in (1)(a) or (b) has been claimed, the owner or operator of a new Class II or Class IV landfill unit, existing Class II or Class IV landfill unit, or lateral expansion of that unit, shall notify the department of such contamination and, thereafter, comply with ARM Title 17, chapter 50, [NEW SUBCHAPTERS III and IV].

(4) An owner or operator shall demonstrate to the department in writing that the owner or operator meets the requirements of this rule, to obtain approval for a small community exemption.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXXIII DESIGN CRITERIA - CLASS II AND CLASS IV LANDFILL UNITS (1) An owner or operator of a new Class II or Class IV landfill unit or a lateral expansion of that unit may construct it only if the owner or operator has obtained department approval of a design that meets applicable Montana ground water quality standards and that:

(a) ensures that the concentration values listed in Table 1 of this rule will not be exceeded in the uppermost aquifer at the relevant point of compliance, as specified by the department; or

(b) utilizes a composite liner and a leachate collection and removal system

that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner.

(2) When determining whether a design complies with (1)(a), the department shall consider the following factors:

- (a) the hydrogeologic characteristics of the facility and surrounding land;
- (b) the climatic factors of the area;
- (c) the volume and physical and chemical characteristics of the leachate; and
- (d) any other matter determined by the department to be necessary to protect human health or the environment.

(3) The relevant point of compliance (RPOC) specified by the department pursuant to (1)(a) may be no more than 150 meters from the vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer. The RPOC must be located within the facility's licensed boundary. In determining the RPOC, the department shall consider the following factors:

- (a) the hydrogeologic characteristics of the facility and surrounding land;
- (b) the volume and physical and chemical characteristics of the leachate;
- (c) the quantity, quality, and direction of flow of ground water;
- (d) the proximity and withdrawal rate of the ground water users;
- (e) the availability of alternative drinking water supplies;
- (f) the existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water, and whether the ground water is currently used or reasonably expected to be used for drinking water;
- (g) public health, safety, and welfare effects;
- (h) practicable capability of the owner or operator; and
- (i) any other matter determined by the department to be necessary to protect human health or the environment.

(4) A liner design submitted under (1)(a) must provide ground water protection equivalent to the liner prescribed in (1)(b).

Table 1

Chemical	MCL (mg/L)
Arsenic	0 .05
Barium	1 .0
Benzene	0 .005
Cadmium	0 .01
Carbon tetrachloride	0 .005
Chromium (hexavalent)	0 .05
2,4-Dichlorophenoxy acetic acid	0 .1
1,4-Dichlorobenzene	0 .075
1,2-Dichloroethane	0 .005
1,1-Dichloroethylene	0 .007
Endrin	0 .0002
Fluoride	4
Lindane	0 .004

Lead	0 .05
Mercury	0 .002
Methoxychlor	0 .1
Nitrate	10
Selenium	0 .01
Silver	0 .05
Toxaphene	0 .005
1,1,1-Trichloromethane	0 .2
Trichloroethylene	0 .005
2,4,5-Trichlorophenoxy acetic acid	0 .01
Vinyl Chloride	0 .002

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXXIV ADDITIONAL DESIGN CRITERIA - CLASS II AND CLASS IV LANDFILL UNITS (1) The owner or operator of a Class II or Class IV landfill unit, or lateral expansion of that unit, also shall comply with the following design criteria and exceptions:

(a) a leachate collection system is not required for a landfill unit that has obtained department approval of a demonstration that there is no potential for migration of a constituent in Appendix I or II to 40 CFR part 258 (July 1, 2008) pursuant to ARM Title 17, chapter 50, [NEW SUBCHAPTER IV];

(b) a liner component consisting of compacted soil or compacted "in situ" subsoil must provide a hydraulic conductivity of no more than 1×10^{-7} cm/sec;

(c) a liner is not required for a Class IV landfill unit located within the approved ground water monitoring network of a licensed Class II landfill facility; and

(d) any other design standard determined by the department to be necessary to meet the requirements of [NEW RULE XXXIII(1)].

(2) An owner or operator of a Class II or Class IV landfill facility shall submit to the department for approval each landfill unit design plan, including any design specifications or applicable plans or documents developed pursuant to this chapter. The design plan must demonstrate compliance with the standards of [NEW RULE XXXIII (1) and (4)].

(3) The owner or operator of a Class II or Class IV landfill unit, or lateral expansion of that unit, shall design and construct a landfill unit leachate collection and leachate removal system required under this subchapter to:

(a) provide for accurate monitoring of the leachate level, measured to within one centimeter, on the liner or base of the unit, and the leachate volume removed from the unit;

(b) provide a minimum slope at the base of the overlying leachate collection layer equal to at least two percent, and a maximum side slope on the liner less than or equal to 33 percent, whenever soil or "in situ" subsoil is compacted for use as a liner component;

(c) provide for secondary containment, monitoring of leachate and removal system components, and monitoring of leachate in collection sumps within alternative liners;

(d) provide for increased hydraulic head in the leachate removal system; and
(e) meet any other requirements determined by the department to be necessary to protect human health or the environment.

(4) An owner or operator of a Class II landfill unit may, if it obtains department approval, recirculate leachate to that unit only if it:

(a) is constructed with a composite liner, leachate collection, and leachate removal system; and

(b) meets any other requirements determined by the department to be necessary to meet the requirements of (1), and the department notifies the owner or operator of the other requirements by mail.

(5) At the time the owner or operator submits a design plan required in (2), the owner or operator of a Class II or Class IV landfill facility shall submit to the department for approval a construction quality control (CQC) and construction quality assurance (CQA) manual describing procedures that provide for conformance with the department-approved design plans required by (2).

(6) Within 60 days after construction of a Class II or Class IV landfill unit is completed, the owner or operator shall submit to the department for approval a final CQC and CQA report that describes, at a minimum, construction activities and deviations, and conformance with the manual required in (5).

(7) Within 60 days after construction of a Class II or Class IV landfill unit is completed, the owner or operator shall submit a certification, by an independent Montana licensed professional engineer, that the project was constructed according to the plan and manual required in (2) and (5).

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: Proposed New Rules XXX through XXXIV would comprise New Subchapter III. The department is proposing the repeal of the existing solid waste program landfill design rules and the adoption of a new subchapter that contains new landfill design rules. The proposed new rules are equivalent to the existing landfill design rules.

The reasons for New Rule XXX are the same as set forth in the statement of reasonable necessity for ARM 17.50.501(3), (4), and (5).

The definitions in New Rule XXXI are being proposed for the same reasons as set forth above in the statement of reasonable necessity for the amendments to ARM 17.50.502.

Proposed New Rule XXXII is equivalent to the existing small community exemption rule in ARM 17.50.506(15) and (16). This rule is being proposed for repeal.

The proposed requirement in New Rule XXXIV(2) that an owner or operator of a Class II or Class IV landfill facility submit to the department for approval each landfill unit design plan is not new. The requirement is found in existing ARM 17.50.506, which is proposed to be repealed.

The reason for the provisions in proposed New Rule XXXIV(3)(e) and (4)(b), which authorize the department to require more information if necessary to determine that a design will meet standards or protect human health or the

environment, is the same as that set forth in the statement for the amendments to ARM 17.50.508.

The requirement in proposed New Rule XXXIV(7) that a final CQC/CQA report and an engineer's certification that the landfill unit was constructed according to its design be submitted to the department within 60 days after construction is completed is necessary to ensure that the department receives the report and certification in a timely manner to determine whether the landfill unit was constructed according to the approved design.

NEW RULE XXXV GENERAL PROVISIONS (1) All applicants, licensees, owners, and operators of solid waste management systems and facilities shall comply with this subchapter, except as otherwise specifically provided in this subchapter. Wherever there is a requirement imposed on an owner or operator in this subchapter, the licensee also shall comply with that requirement.

(2) Whenever a person, including an applicant or owner or operator, is required by this subchapter to submit a document for department approval of an action, the person may not take that action unless the person first submits a document containing all information necessary for the department to determine whether the action complies with the requirements of this subchapter and obtains department approval.

(3) When authorized by a court order or an agreement between the department and a landowner on whose property a violation of Title 75, chapter 10, part 2, MCA, or this subchapter has occurred, the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or this subchapter.

(4) Whenever the department determines under this subchapter that any information, submittal, plan, factor, procedure, condition, criterion, requirement, or change is necessary to protect human health or the environment, it shall mail notification of the determination to the appropriate applicant, owner, operator, or licensee.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE XXXVI DEFINITIONS In this subchapter, the following definitions apply:

(1) "Appendix I to 40 CFR part 258" means the appendix from the July 1, 2008, Code of Federal Regulations, as set forth in [NEW RULE XL].

(2) "Appendix II to 40 CFR part 258" means the appendix from the July 1, 2008, Code of Federal Regulations, as set forth in [NEW RULE XLI].

(3) "Aquifer" has the meaning given in [NEW RULE III].

(4) "Class II landfill facility" has the meaning given in ARM 17.50.504.

(5) "Class IV landfill facility" has the meaning given in ARM 17.50.504.

(6) "Closure" has the meaning given in ARM 17.50.502.

(7) "Department" has the meaning given in ARM 17.50.502.

(8) "Disposal" has the meaning given in 75-10-203(3), MCA.

(9) "Existing disposal unit" has the meaning given in ARM 17.50.502.

- (10) "Facility" has the meaning given in ARM 17.50.502.
- (11) "Ground water" has the meaning given in ARM 17.50.502.
- (12) "Landfill" has the meaning given in ARM 17.50.502.
- (13) "Lateral expansion" has the meaning given in ARM 17.50.502.
- (14) "Operator" has the meaning given in ARM 17.50.502.
- (15) "Owner" has the meaning given in ARM 17.50.502.
- (16) "Post-closure care" has the meaning given in ARM 17.50.502.
- (17) "Qualified ground water scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in ground water hydrology and related fields, as may be demonstrated by state registration, professional certifications, or completion of accredited university programs, that enable that individual to make sound professional judgments regarding ground water monitoring, contaminant fate and transport, and corrective action.
- (18) "Saturated zone" means that part of the earth's crust in which all voids are filled with water.
- (19) "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.
- (20) "Unit" has the meaning given in ARM 17.50.502.
- (21) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XXXVII APPLICABILITY OF LANDFILL GROUND WATER MONITORING AND CORRECTIVE ACTION

(1) The requirements in this subchapter apply to Class II and Class IV landfill units, except as provided in (2).

(2) Ground water monitoring requirements under [NEW RULE XXXVIII through XLI] for a Class II or Class IV landfill unit may be suspended by the department if the owner or operator submits, and obtains department approval for, a demonstration that there is no potential for migration of a constituent in Appendix I or II to 40 CFR part 258 (July 1, 2008) from that Class II or Class IV landfill unit to the uppermost aquifer during the active life of the unit and the post-closure care period. This demonstration must be certified by a qualified ground water scientist, and must be based upon:

(a) site-specific field collected measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport; and

(b) contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and environment.

(3) The owner or operator of an existing Class II or Class IV landfill unit, or a lateral expansion of that unit, except one meeting the conditions of [NEW RULE XXXII], shall comply with the ground water monitoring requirements of ARM Title 17,

chapter 50, subchapters 5 through [NEW SUBCHAPTER V].

(4) A new Class II or Class IV landfill unit must be in compliance with the ground water monitoring requirements specified in [NEW RULE XXXVIII through XLI] before waste may be placed in the unit.

(5) Once ground water monitoring has begun at a Class II or Class IV landfill unit, the owner or operator shall continue to conduct ground water monitoring throughout the active life and post-closure care period of that unit, as specified in [NEW RULE L].

(6) The department may establish, and the owner or operator shall comply with, alternative schedules for demonstrating compliance with [NEW RULE XXXVIII(6)(b)], pertaining to notification of placement of certification in operating record; [NEW RULE XL(5)(a)], pertaining to notification that statistically significant increase (SSI) notice is in operating record; [NEW RULE XL(5)(b) and (7)], pertaining to an assessment monitoring program; [NEW RULE XLI(2)], pertaining to sampling and analyzing constituents in Appendix II to 40 CFR part 258 (July 1, 2008); [NEW RULE XLI(4)(a)], pertaining to placement of notice (Appendix II constituents detected) in record and notification of notice in record; [NEW RULE XLI(7)], pertaining to sampling for Appendix I and II; [NEW RULE XLI(7)], pertaining to notification (and placement of notice in record) of SSI above ground water protection standard; [NEW RULE XLI(7)(a)(iv)] and [NEW RULE XLII(1)], pertaining to assessment of corrective measures; [NEW RULE XLIII(1)], pertaining to selection of remedy and notification of placement in record; [NEW RULE XLIV(3)(e)], pertaining to notification of placement in record (alternative corrective action measures); and [NEW RULE XLIV(7)], pertaining to notification of placement in record (certification of remedy completed).

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XXXVIII GROUND WATER MONITORING SYSTEMS (1) An owner or operator required to monitor under this subchapter shall install a ground water monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield ground water samples from the uppermost aquifer that:

(a) represent the quality of background ground water that has not been affected by leakage from a unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the waste management area when:

(i) hydrogeologic conditions do not allow the owner or operator to determine the wells that are hydraulically upgradient; or

(ii) sampling at other wells will provide an indication of background ground water quality that is as representative or more representative than that provided by the upgradient wells; and

(b) represent the quality of ground water passing the relevant point of compliance specified by the department under [NEW RULE XXXIII(3)]. The downgradient monitoring system must be installed at the relevant point of compliance specified by the department under [NEW RULE XXXIII(3)] that ensures

detection of ground water contamination in the uppermost aquifer. When physical obstacles preclude installation of ground water monitoring wells at the relevant point of compliance at existing disposal units, the downgradient monitoring system may be installed at the closest practicable distance hydraulically downgradient from the relevant point of compliance specified by the department under [NEW RULE XXXIII(3)] that ensures detection of ground water contamination in the uppermost aquifer.

(2) The department may approve a multi-unit ground water monitoring system instead of separate ground water monitoring systems for each Class II or Class IV landfill unit when the facility has several units, if the multi-unit ground water monitoring system meets the requirements of (1) and will be as protective of human health and the environment as individual monitoring systems for each Class II or Class IV landfill unit, based on the following factors:

- (a) number, spacing, and orientation of the Class II or Class IV landfill unit;
- (b) hydrogeologic setting;
- (c) site history;
- (d) engineering design of the Class II or Class IV landfill unit; and
- (e) type of waste accepted at the Class II or Class IV landfill unit.

(3) Monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of ground water samples. The annular space, i.e., the space between the bore hole and well casing, above the sampling depth must be sealed to prevent contamination of samples and the ground water.

(4) The owner or operator of a Class II or Class IV landfill unit required to monitor under this subchapter shall:

(a) submit a ground water monitoring plan to the department for approval that includes:

- (i) the location, number, depth, design, installation, development, and decommission of any monitoring wells;
- (ii) plans for the design, installation, development, and decommission of piezometers or other measurement, sampling, and analytical devices;
- (iii) discussions of the anticipated ground water monitoring system and schedule of sampling for closed portions of the facility, if applicable; and
- (iv) any other information determined by the department to be necessary to protect human health or the environment;

(b) update the ground water monitoring plan at least once every five years, except that a ground water monitoring plan for a closed facility must be updated at least every ten years;

(c) notify the department that the approved ground water monitoring systems plan has been placed in the operating record; and

(d) provide any other information determined by the department to be necessary to protect human health or the environment.

(5) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(6) The number, spacing, and depths of monitoring wells must be:

(a) determined based upon site-specific technical information that must include thorough characterization of:

(i) aquifer thickness, ground water flow rate, ground water flow direction, including seasonal and temporal fluctuations in ground water flow; and

(ii) saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer including, but not limited to, thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities, and effective porosities; and

(b) be certified by a qualified ground water scientist and approved by the department. Within 14 days of this certification, the owner or operator shall notify the department that the certification has been placed in the operating record.

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XXXIX GROUND WATER SAMPLING AND ANALYSIS

REQUIREMENTS (1) An owner or operator required to monitor ground water under this subchapter shall implement a ground water monitoring program that includes consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of ground water quality at the background and downgradient wells installed in compliance with [NEW RULE XXXVIII(1)]. The owner or operator shall submit to the department for approval a sampling and analysis plan that documents sampling and analysis procedures and techniques for:

(a) sample collection;

(b) sample preservation and shipment;

(c) analytical procedures;

(d) chain of custody control;

(e) quality assurance and quality control; and

(f) any other matter determined by the department to be necessary to protect human health or the environment.

(2) The owner or operator of a facility shall notify the department that the approved sampling and analysis plan has been placed in the operating record.

(3) The ground water monitoring program required in (1) must include sampling and analytical methods that are appropriate for ground water sampling and that accurately measure constituents and parameters that are required to be monitored in ground water samples. Ground water samples may not be field-filtered prior to laboratory analysis.

(4) The sampling procedures and frequency must be protective of human health and the environment.

(5) Ground water elevations must be measured in each well immediately prior to purging, each time ground water is sampled. The owner or operator shall determine the rate and direction of ground water flow each time ground water is sampled. Ground water elevations in wells that monitor the same waste management area must be measured within a period of time short enough to avoid temporal variations in ground water flow that could preclude accurate determination

of ground water flow rate and direction.

(6) The owner or operator shall establish background ground water quality in a hydraulically upgradient or background well(s) for each of the constituents and parameters required in the particular ground water monitoring program that applies to the Class II or Class IV landfill unit, as determined under [NEW RULE XL(1)] or [NEW RULE XLI(1)]. Background ground water quality may be established at wells that are not located hydraulically upgradient from the Class II and Class IV landfill unit if they meet the requirements of [NEW RULE XXXVIII(1)(a)].

(7) The number of samples collected to establish ground water quality data must be consistent with the appropriate statistical procedures determined pursuant to (8). The sampling procedures must be those specified under [NEW RULE XL(2)] for detection monitoring, [NEW RULE XLI(2) and (4)] for assessment monitoring, and [NEW RULE XLII(2)] for corrective action.

(8) The owner or operator shall specify in the operating record one of the statistical methods in (8)(a) through (e) to be used in evaluating ground water monitoring data for each constituent or parameter. The statistical test chosen must be conducted separately for each constituent and parameter in each well:

(a) a parametric analysis of variance (ANOVA) followed by multiple comparisons procedures, to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean levels and the background mean levels for each constituent or parameter;

(b) an analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures, to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median levels and the background median levels for each constituent or parameter;

(c) a tolerance or prediction interval procedure in which an interval for each constituent or parameter is established from the distribution of the background data, and the level of each constituent or parameter in each compliance well is compared to the upper tolerance or prediction limit;

(d) a control chart approach that provides control limits for each constituent or parameter; or

(e) another statistical test method that meets the performance standards of (9). The owner or operator shall place a justification for this alternative in the operating record and notify the department of the use of this alternative test. The justification must demonstrate that the alternative method meets the performance standards of (9).

(9) Any statistical method chosen under (8) must comply with the following performance standards, as appropriate:

(a) the statistical method used to evaluate ground water monitoring data must be appropriate for the distribution of constituents and parameters. If the distribution of the constituents or parameters is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents or parameters differ, more than one statistical method may be needed;

(b) if an individual well comparison procedure is used to compare a

constituent or parameter concentration in an individual compliance well with background constituent or parameter concentrations or a ground water protection standard, the test must be performed at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experiment wise error rate for each testing period must be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts;

(c) if a control chart approach is used to evaluate ground water monitoring data, the specific type of control chart and its associated parameter values must be protective of human health and the environment. The parameters must be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent and parameter of concern;

(d) if a tolerance interval or a predictional interval is used to evaluate ground water monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be protective of human health and the environment. These parameters must be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent or parameter of concern;

(e) the statistical method must account for data below the limit of detection with one or more statistical procedures that are protective of human health and the environment. Any practical quantitation limit (pql) that is used in the statistical method must be the lowest concentration level that reliably can be achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility; and

(f) if necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(10) The owner or operator shall determine whether there is a statistically significant increase over background values for each constituent or parameter required to be monitored in the particular ground water monitoring program that applies to the Class II or Class IV landfill unit, as determined under [NEW RULE XL(1)] or [NEW RULE XLI(1)].

(11) In determining whether a statistically significant increase described in (10) has occurred, the owner or operator shall:

(a) compare the ground water quality for each constituent or parameter at each monitoring well designated pursuant to [NEW RULE XXXVIII(1)(b)] to the background value of that constituent or parameter, according to the statistical procedures and performance standards specified under (8) and (9); and

(b) within a reasonable period of time after completing sampling and analysis, determine, for each monitoring well, whether there has been a statistically significant increase over background levels.

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XL DETECTION MONITORING PROGRAM (1) The owner or operator of a Class II or Class IV landfill unit shall conduct detection monitoring for the unit at all ground water monitoring wells defined under [NEW RULE XXXVIII(1)(a) and (b)]. At a minimum, that detection monitoring must include monitoring for each constituent in Appendix I to 40 CFR part 258 (July 1, 2008), set forth below, unless exempted in (2), and each parameter in any alternative list established under (3) for which the department has mailed notification to the owner or operator.

(2) The department may exempt an owner or operator of a Class II or Class IV landfill unit from monitoring a constituent in Appendix I to 40 CFR part 258 (July 1, 2008) if the owner or operator makes a written demonstration, approved by the department, that the exempted constituent is not reasonably expected to be in, or derived from, the waste contained in the unit.

(3) The department may establish an alternative list of inorganic indicator parameters for a Class II or Class IV landfill unit, in lieu of some or all of the heavy metals that comprise constituents 1 through 15 in Appendix I to 40 CFR part 258 (July 1, 2008), if the department determines that the parameters in the alternative list provide a reliable indication of inorganic releases from the Class II or Class IV landfill unit to the ground water. In determining parameters in the alternative list, the department shall consider the following factors:

(a) the types, quantities, and concentrations of constituents in wastes managed at the Class II or Class IV landfill unit;

(b) the mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the Class II or Class IV landfill unit;

(c) the detectability of indicator parameters, waste constituents, and reaction products in the ground water; and

(d) the concentration or values and coefficients of variation of indicator parameters or constituents in the background ground water.

(4) An owner or operator of a Class II or Class IV landfill unit required to conduct ground water monitoring under this subchapter shall monitor for all constituents and parameters required in this rule at least semiannually during the active life of the facility, including closure and the post-closure period. During the first semiannual sampling event, a minimum of four independent samples from each background and downgradient well must be collected and analyzed for all constituents and parameters for which monitoring is required in this rule. At least one sample from each background and downgradient well must be collected and analyzed during subsequent semiannual sampling events. The department may specify an appropriate alternative frequency for repeated sampling and analysis for constituents and parameters for which monitoring is required in this rule during the active life of the unit, including closure and the post-closure care period. An alternative frequency during the active life of the unit, including closure, may be no less frequent than annual. An alternative frequency must be based on consideration of the following factors:

(a) lithology of the aquifer and unsaturated zone;

(b) hydraulic conductivity of the aquifer and unsaturated zone;

(c) ground water flow rates;

(d) minimum distance between upgradient edge of the Class II or Class IV landfill unit and downgradient monitoring well screen (minimum distance of travel); and

(e) resource value of the aquifer.

(5) If the owner or operator of a Class II or Class IV landfill unit, or the department, determines, pursuant to [NEW RULE XXXIX(8)], that there is a statistically significant increase over the background level for a constituent required to be monitored in this rule, at any monitoring well at the boundary specified under [NEW RULE XXXVIII(1)(b)], the owner or operator shall:

(a) within 14 days after this determination, or notification by the department of the department's determination, place a notice in the operating record indicating each constituent that has shown a statistically significant change from a background level, and notify the department that this notice was placed in the operating record; and

(b) submit for department approval, and implement, an assessment monitoring program meeting the requirements of [NEW RULE XLI], within 90 days after the determination was made, or notice from the department was received, except as provided for in (7).

(6) If the department determines that there has been a statistically significant change from background in a parameter on an alternative list established under (3), at a monitoring well at the boundary specified under [NEW RULE XXXVIII(1)(b)], and that assessment monitoring is necessary to protect human health or the environment, the department shall notify the owner or operator of the Class II or Class IV landfill unit of the determination, and the owner or operator shall give notice and establish assessment monitoring as required in (5).

(7) An owner or operator required to establish an assessment monitoring program under (5) or (6) may submit for department approval a demonstration that a source other than a Class II or Class IV landfill unit caused the statistically significant change described in (5) or (6) or that it resulted from error in sampling, analysis, or statistical evaluation, or from natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground water scientist and placed in the operating record. If the department approves the demonstration, the owner or operator is not required to commence assessment monitoring, but shall continue detection monitoring as specified in this rule. If the department has not approved a demonstration, within 90 days after the determination described in (5) or (6) has been made, the owner or operator shall establish an assessment monitoring program as required in [NEW RULE XLI].

Appendix I to 40 CFR Part 258 (July 1, 2008)
Constituents for Detection Monitoring

Common name ¹	CAS RN ²
Inorganic Constituents:	
(1) Antimony	(Total)
(2) Arsenic	(Total)
(3) Barium	(Total)

(4) Beryllium	(Total)
(5) Cadmium	(Total)
(6) Chromium	(Total)
(7) Cobalt	(Total)
(8) Copper	(Total)
(9) Lead	(Total)
(10) Nickel	(Total)
(11) Selenium	(Total)
(12) Silver	(Total)
(13) Thallium	(Total)
(14) Vanadium	(Total)
(15) Zinc	(Total)

Organic Constituents:

(16) Acetone	67-64-1
(17) Acrylonitrile	107-13-1
(18) Benzene	71-43-2
(19) Bromochloromethane	74-97-5
(20) Bromodichloromethane	75-27-4
(21) Bromoform; Tribromomethane	75-25-2
(22) Carbon disulfide	75-15-0
(23) Carbon tetrachloride	56-23-5
(24) Chlorobenzene	108-90-7
(25) Chloroethane; Ethyl chloride	75-00-3
(26) Chloroform; Trichloromethane	67-66-3
(27) Dibromochloromethane; Chlorodibromomethane	124-48-1
(28) 1,2-Dibromo-3-chloropropane; DBCP	96-12-8
(29) 1,2-Dibromoethane; Ethylene dibromide; EDB	106-93-4
(30) o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1
(31) p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7
(32) trans-1, 4-Dichloro-2-butene	110-57-6
(33) 1,1-Dichloroethane; Ethylidene chloride	75-34-3
(34) 1,2-Dichloroethane; Ethylene dichloride	107-06-2
(35) 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride	75-35-4
(36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene	156-59-2
(37) trans-1, 2-Dichloroethylene; trans-1,2-Dichloroethene	156-60-5
(38) 1,2-Dichloropropane; Propylene dichloride	78-87-5
(39) cis-1,3-Dichloropropene	10061-01-5
(40) trans-1,3-Dichloropropene	10061-02-6
(41) Ethylbenzene	100-41-4
(42) 2-Hexanone; Methyl butyl ketone	591-78-6
(43) Methyl bromide; Bromomethane	74-83-9
(44) Methyl chloride; Chloromethane	74-87-3
(45) Methylene bromide; Dibromomethane	74-95-3
(46) Methylene chloride; Dichloromethane	75-09-2
(47) Methyl ethyl ketone; MEK; 2-Butanone	78-93-3
(48) Methyl iodide; Iodomethane	74-88-4

(49) 4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1
(50) Styrene	100-42-5
(51) 1,1,1,2-Tetrachloroethane	630-20-6
(52) 1,1,2,2-Tetrachloroethane	79-34-5
(53) Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4
(54) Toluene	108-88-3
(55) 1,1,1-Trichloroethane; Methylchloroform	71-55-6
(56) 1,1,2-Trichloroethane	79-00-5
(57) Trichloroethylene; Trichloroethene	79-01-6
(58) Trichlorofluoromethane; CFC-11	75-69-4
(59) 1,2,3-Trichloropropane	96-18-4
(60) Vinyl acetate	108-05-4
(61) Vinyl chloride	75-01-4
(62) Xylenes	1330-20-7

¹Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals

²Chemical Abstract Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XLI ASSESSMENT MONITORING PROGRAM (1) An owner or operator of a Class II or Class IV landfill unit shall conduct assessment monitoring at that unit as required in [NEW RULE XL] and this rule.

(2) Within 90 days after being required by [NEW RULE XL] to establish an assessment monitoring program, and annually thereafter, the owner or operator shall sample and analyze the ground water for all constituents identified in Appendix II to 40 CFR part 258 (July 1, 2008), set forth below. A minimum of one sample from each downgradient well must be collected and analyzed during each sampling event. For any constituent detected in the downgradient wells as a result of monitoring of all constituents in Appendix II to 40 CFR part 258 (July 1, 2008), a minimum of four independent samples from each background and downgradient well must be collected and analyzed to establish background for the constituent. The owner or operator shall conduct assessment monitoring for constituents in Appendix II to 40 CFR part 258 (July 1, 2008) for any subset of wells specified by the department. The department may exempt an owner or operator of a Class II or Class IV landfill unit from monitoring a constituent in Appendix II to 40 CFR part 258 (July 1, 2008) if the owner or operator makes a written demonstration, approved by the department, that the exempted constituent is not reasonably expected to be in, or derived from, the waste contained in the unit.

(3) The department may specify, and an owner or operator shall comply with, an appropriate alternate frequency for repeated sampling and analysis of the constituents in Appendix II to 40 CFR part 258 (July 1, 2008) required by (2), during the active life of the unit, including closure and post-closure care of the unit, considering the following factors:

- (a) lithology of the aquifer and unsaturated zone;
- (b) hydraulic conductivity of the aquifer and unsaturated zone;
- (c) ground water flow rates;
- (d) minimum distance between upgradient edge of the Class II or Class IV landfill unit and downgradient monitoring well screen (minimum distance of travel);
- (e) resource value of the aquifer; and
- (f) nature (fate and transport) of any constituents detected by monitoring required by this rule.

(4) After obtaining the results from the initial or subsequent sampling events required in (2), the owner or operator shall:

- (a) within 14 days, place a notice in the operating record identifying the constituents in Appendix II to 40 CFR part 258 (July 1, 2008) that have been detected and notify the department that this notice has been placed in the operating record;

- (b) within 90 days, and on at least a semiannual basis thereafter, resample all wells described in [NEW RULE XXXVIII(1)], conduct analyses for all constituents in Appendix I to 40 CFR part 258 (July 1, 2008) or in the alternative list of parameters established in accordance with [NEW RULE XL(3)], and for those constituents in Appendix II to 40 CFR part 258 (July 1, 2008) that are detected by monitoring required by (2), and record their concentrations in the facility operating record. At least one sample from each background and downgradient well must be collected and analyzed during these sampling events. If specified by the department, the owner or operator shall conduct sampling and analyses under this subsection at an alternative frequency during the active life of the unit, including closure and the post-closure period. The alternative frequency may be no less frequent than annual during the active life of the unit, including closure. The alternative frequency must be based on consideration of the factors specified in (3);

- (c) establish the background concentration for each constituent or parameter detected pursuant to (2) or (4)(b); and

- (d) establish the ground water protection standard for each constituent or parameter detected pursuant to (2) or (4)(b). The ground water protection standard must be established in accordance with (8).

(5) If the owner or operator determines that concentrations of all constituents in Appendix II to 40 CFR part 258 (July 1, 2008) are at or below background values, using the statistical procedures described in [NEW RULE XXXIX(8)], for two consecutive sampling events, the owner or operator shall submit this determination to the department for approval and may, if approved, return to detection monitoring.

(6) If the owner or operator determines, using the statistical procedures in [NEW RULE XXXIX(8)], that the concentration of a constituent in Appendix II to 40 CFR part 258 (July 1, 2008) is above background, but that all concentrations are below the ground water protection standard established under (8), the owner or operator shall submit this determination to the department for approval and shall continue assessment monitoring in accordance with this rule, unless notified otherwise by the department.

(7) If the owner, operator, or department determines, using the same statistical procedures as required in [NEW RULE XXXIX(8)], that, in any sampling event required in this rule, there has been a statistically significant increase above

the ground water protection standard established under (8) in the concentration of a constituent in Appendix II to 40 CFR part 258 (July 1, 2008), the owner or operator shall, within 14 days, place a notice in the operating record identifying each constituent in Appendix II to 40 CFR part 258 (July 1, 2008) that has exceeded the ground water protection standard and notify the department and all appropriate local government officials that the notice has been placed in the operating record. The owner or operator shall either:

(a) comply with (7)(a)(i) through (iv), as follows:

(i) characterize the nature and extent of the release by installing additional monitoring wells as necessary;

(ii) install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with (4)(b);

(iii) notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination, if contaminants have migrated off-site if indicated by sampling of wells in accordance with (7)(a); and

(iv) initiate an assessment of corrective measures as required by [NEW RULE XLII], within 90 days; or

(b) demonstrate that a source other than a Class II or Class IV landfill unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or from natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground water scientist and submitted to the department for approval and placed in the operating record. If the demonstration is approved, the owner or operator shall continue monitoring in accordance with the assessment monitoring program required by this rule, and may return to detection monitoring if the concentrations of all of the constituents in Appendix II to 40 CFR part 258 (July 1, 2008) are at or below background levels as specified in (5). Until the department approves a demonstration, the owner or operator shall comply with (7), including initiating an assessment of corrective measures.

(8) The owner or operator shall establish a ground water protection standard for each constituent in Appendix II to 40 CFR part 258 (July 1, 2008) and parameter in the alternative list in [NEW RULE XL(3)] detected in the ground water. The ground water protection standard must be:

(a) for a constituent for which a maximum contaminant level (MCL) has been promulgated under Montana ground water quality standards, the MCL for that constituent;

(b) for a constituent for which an MCL has not been promulgated, the background concentration for the constituent established from wells in accordance with [NEW RULE XXXVIII(1)(a)];

(c) for a constituent for which the background level is higher than the MCL identified under (8)(a) or health based levels identified under (9)(a), the background concentration; or

(d) for a constituent or parameter in the alternative list in [NEW RULE XL(3)] for which a ground water quality standard has been established pursuant to (9), that ground water quality standard.

(9) If the department believes a standard is needed for a constituent or parameter in the alternative list in [NEW RULE XL(3)] for which an MCL or ground

water quality standard has not been established by Montana law or rule, the department shall propose to the Board of Environmental Review established in 2-15-3502, MCA, the adoption of a ground water quality standard for that constituent or parameter. The ground water quality standard proposed must be health-based and set at an appropriate level that satisfies the following criteria:

- (a) the level is derived in a manner consistent with EPA guidelines for assessing the health risks of environmental pollutants (51 FR 33992, 34006, 34014, 34028, Sept. 24, 1986);
- (b) the level is based on scientifically valid studies conducted in accordance with the Toxic Substances Control Act Good Laboratory Practice Standards (40 CFR part 792) or equivalent requirements;
- (c) for carcinogens, the level represents a concentration associated with an excess lifetime cancer risk level, due to continuous lifetime exposure, within the 1×10^{-4} to 1×10^{-6} range; and
- (d) for systemic toxicants, the level represents a concentration to which the human population, including sensitive subgroups, could be exposed to on a daily basis that is likely to be without appreciable risk of deleterious effects during a lifetime. For purposes of this subchapter, systemic toxicants include toxic chemicals that cause effects other than cancer or mutation.

(10) In proposing a ground water quality standard under (9), the department shall consider the following:

- (a) multiple contaminants in the ground water;
- (b) exposure threats to sensitive environmental receptors; and
- (c) other site-specific exposure or potential exposure to ground water.

Appendix II to 40 CFR Part 258 (July 1, 2008)
List of Hazardous Inorganic and Organic Constituents

Common name ¹	CAS RN ²	Chemical abstracts service index name ³
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-
Acenaphthylene	208-96-8	Acenaphthylene
Acetone	67-64-1	2-Propanone
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile
Acetophenone	98-86-2	Ethanone, 1-phenyl-
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-
Acrolein	107-02-8	2-Propenal
Acrylonitrile	107-13-1	2-Propenenitrile
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1,4,4a,5,8,8a)-

Allyl chloride	107-05-1	1-Propene, 3-chloro-
4-Aminobiphenyl	92-67-1	[1,1'-Biphenyl]-4-amine
Anthracene	120-12-7	Anthracene
Antimony	(Total)	Antimony
Arsenic	(Total)	Arsenic
Barium	(Total)	Barium
Benzene	71-43-2	Benzene
Benzo[a]anthracene; Benzanthracene	56-55-3	Benz[a]anthracene
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene
Benzyl alcohol	100-51-6	Benzenemethanol
Beryllium	(Total)	Beryllium
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 α ,2 α ,3 β ,4 α ,5 β ,6 β)-
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 α ,2 β ,3 α ,4 β ,5 α ,6 β)-
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 α ,2 α ,3 α ,4 β ,5 α ,6 β)-
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6- hexachloro-, (1 α ,2 α , 3 β , 4 α ,5 α ,6 β)-
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1'-[methylenebis (oxy)]bis [2-chloro-
Bis(2-chloroethyl)ether; Dichloroethyl ether	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
Bis(2-chloro-1-methylethyl) ether; 2,2'-Dichlorodiisopropyl ether; DCIP, See footnote 4	108-60-1	Propane, 2,2'-oxybis[1-chloro-
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester
Bromochloromethane; Chlorobromomethane	74-97-5	Methane, bromochloro-
Bromodichloromethane;	75-27-4	Methane, bromodichloro-

Dibromochloromethane

Bromoform; Tribromomethane	75-25-2	Methane, tribromo-
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester
Cadmium	(Total)	Cadmium
Carbon disulfide	75-15-0	Carbon disulfide
Carbon tetrachloride	56-23-5	Methane, tetrachloro-
Chlordane	See footnote 5	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-
Chlorobenzene	108-90-7	Benzene, chloro-
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-(4-chlorophenyl)-hydroxy-, ethyl ester.
p-Chloro-m-cresol; 4-Chloro-3-methylphenol	59-50-7	Phenol, 4-chloro-3-methyl-
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-
Chloroform; Trichloromethane	67-66-3	Methane, trichloro-
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-
2-Chlorophenol	95-57-8	Phenol, 2-chloro-
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-
Chromium	(Total)	Chromium
Chrysene	218-01-9	Chrysene
Cobalt	(Total)	Cobalt
Copper	(Total)	Copper
m-Cresol; 3-Methylphenol	108-39-4	Phenol, 3-methyl-
o-Cresol; 2-Methylphenol	95-48-7	Phenol, 2-methyl-
p-Cresol; 4-Methylphenol	106-44-5	Phenol, 4-methyl-
Cyanide	57-12-5	Cyanide
2,4-D; 2,4-	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-

Dichlorophenoxyacetic acid		
4,4'-DDD	72-54-8	Benzene 1,1'-(2,2-dichloroethylidene) bis[4-chloro-
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethenylidene) bis[4-chloro-
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene) bis[4-chloro-
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S- (2,3-dichloro-2-propenyl) ester.
Dibenz[a,h]anthracene	53-70-3	Dibenz[a,h]anthracene
Dibenzofuran	132-64-9	Dibenzofuran
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-
1,2-Dibromoethane; Ethylene dibromide; EDB	106-93-4	Ethane, 1,2-dibromo-
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-
m-Dichlorobenzene; 1,3-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-
p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-
3,3'-Dichlorobenzidine	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-
Dichlorodifluoromethane; CFC 12	75-71-8	Methane, dichlorodifluoro-
1,1-Dichloroethane; Ethyldiene chloride	75-34-3	Ethane, 1,1-dichloro-
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-
1,1-Dichloroethylene; 1,1-Dichloroethene;	75-35-4	Ethene, 1,1-dichloro-

Vinylidene chloride cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene	156-59-2	Ethene, 1,2-dichloro-(Z)-
trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	156-60-5	Ethene, 1,2-dichloro-, (E)-
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-
1,3-Dichloropropane; Trimethylene dichloride	142-28-9	Propane, 1,3-dichloro-
2,2-Dichloropropane; Isopropylidene chloride	594-20-7	Propane, 2,2-dichloro-
1,1-Dichloropropene	563-58-6	1-Propene, 1,1-dichloro-
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1α,2β,2α,3β,6β,6α,7β,7α)-
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
7,12-Dimethylbenz[a]anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
3,3'-Dimethylbenzidine	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
alpha, alpha-Dimethylphenethylamine	122-09-8	Benzeneethanamine, α,α-dimethyl-
2,4-Dimethylphenol; m-Xylenol	105-67-9	Phenol, 2,4-dimethyl-
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester

m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-
4,6-Dinitro-o-cresol; 4,6-Dinitro-2-methylphenol	534-52-1	Phenol, 2-methyl-4,6-dinitro-
2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
Diphenylamine	122-39-4	Benzenamine, N-phenyl-
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2- (ethylthio)ethyl] ester
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodiox-athiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3 α ,5 α ,6 β ,9 β , 9 α)-
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide
Endrin	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1 α , 2 β ,2a β , 3 α ,6 α ,6a β ,7 β ,7 α)-
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pentalene-5-carboxaldehyde,2,2a,3,3,4,7-hexachlorodecahydro-(1 α ,2 β ,2a β ,4 β ,4a β ,5 β ,6a β ,6b β ,7R*)-
Ethylbenzene	100-41-4	Benzene, ethyl-
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester
Famphur	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester

Fluoranthene	206-44-0	Fluoranthene
Fluorene	86-73-7	9H-Fluorene
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a,-hexahydro-(1a α ,1b β ,2 α ,5 α ,5a β ,6 β ,6a α)
Hexachlorobenzene	118-74-1	Benzene, hexachloro-
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
Hexachloroethane	67-72-1	Ethane, hexachloro-
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
2-Hexanone; Methyl butyl ketone	591-78-6	2-Hexanone
Indeno(1,2,3-cd)pyrene	193-39-5	Indeno[1,2,3-cd]pyrene
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-
Isodrin	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1 α , 4 α , 4a β ,5 β ,8 β ,8a β)-
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta-[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
Lead	(Total)	Lead
Mercury	(Total)	Mercury
Methacrylonitrile	126-98-7	2-Propenenitrile, 2-methyl-
Methapyrilene	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2, trichloroethylidene)bis [4-methoxy-

Methyl bromide; Bromomethane	74-83-9	Methane, bromo-
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
Methyl ethyl ketone; MEK; 2-Butanone	78-93-3	2-Butanone
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl-
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-
Naphthalene	91-20-3	Naphthalene
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione
1-Naphthylamine	134-32-7	1-Naphthalenamine
2-Naphthylamine	91-59-8	2-Naphthalenamine
Nickel	(Total)	Nickel
o-Nitroaniline; 2-Nitroaniline	88-74-4	Benzenamine, 2-nitro-
m-Nitroaniline; 3-Nitroaniline	99-09-2	Benzenamine, 3-nitro-
p-Nitroaniline; 4-Nitroaniline	100-01-6	Benzenamine, 4-nitro-
Nitrobenzene	98-95-3	Benzene, nitro-
o-Nitrophenol; 2-Nitrophenol	88-75-5	Phenol, 2-nitro-
p-Nitrophenol; 4-Nitrophenol	100-02-7	Phenol, 4-nitro-
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-

N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-
N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylNitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-
N-Nitrosomethylethalamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
Pentachlorobenzene	608-93-5	Benzene, pentachloro-
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-
Pentachlorophenol	87-86-5	Phenol, pentachloro-
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)
Phenanthrene	85-01-8	Phenanthrene
Phenol	108-95-2	Phenol
p-Phenylenediamine	106-50-3	1,4-Benzenediamine
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
Polychlorinated biphenyls; PCBs	See footnote 6	1,1'-Biphenyl, chloro derivatives
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile
Pyrene	129-00-0	Pyrene
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
Selenium	(Total)	Selenium
Silver	(Total)	Silver
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
Styrene	100-42-5	Benzene, ethenyl-
Sulfide	18496-25-8	Sulfide

2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93-76-5	Acetic acid, (2,4,5- trichlorophenoxy)-
2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo- p-dioxin	1746-01-6	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene	127-18-4	Ethene, tetrachloro-
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-
Thallium	(Total)	Thallium
Tin	(Total)	Tin
Toluene	108-88-3	Benzene, methyl-
o-Toluidine	95-53-4	Benzenamine, 2-methyl-
Toxaphene	See footnote 7	Toxaphene
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-
1,1,1-Trichloroethane; Methylchloroform	71-55-6	Ethane, 1,1,1-trichloro-
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-
Trichlorofluoromethane; CFC-11	75-69-4	Methane, trichlorofluoro-
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-
Vanadium	(Total)	Vanadium
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester
Vinyl chloride; Chloroethene	75-01-4	Ethene, chloro-

Xylene (total)	See footnote Benzene, dimethyl- 8	
Zinc	(Total)	Zinc

¹Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

²Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

³CAS index names are those used in the 9th Cumulative Index.

⁴This substance is often called bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, propane, 2,2"-oxybis[2-chloro-(CAS RN 39638-32-9).

⁵Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6).

⁶Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5).

⁷Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

⁸Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7).

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XLII ASSESSMENT OF CORRECTIVE MEASURES

(1) Within 90 days after a determination is made pursuant to [NEW RULE XLI] that a constituent listed in Appendix II to 40 CFR part 258 (July 1, 2008) has been detected at a statistically significant level exceeding the ground water protection standards defined under [NEW RULE XLI(8)], or applicable Montana ground water quality standards, the owner or operator of a facility shall:

(a) initiate an assessment of corrective measures; and
(b) submit to the department for approval an assessment of corrective measures that addresses the criteria listed in (3) and any other criteria determined by the department to be necessary to protect human health or the environment.

(2) The owner or operator shall continue to monitor in accordance with the assessment monitoring program as specified in [NEW RULE XLI].

(3) The assessment in (1) must include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under [NEW RULE XLIII], addressing at least the following:

- (a) the performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;
 - (b) the time required to begin and complete the remedy;
 - (c) the costs of remedy implementation; and
 - (d) the institutional requirements such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).
- (4) Prior to the selection of a remedy, the owner or operator shall discuss the results of the corrective measures assessment in a public meeting with interested and affected parties.

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XLIII SELECTION OF REMEDY (1) Based on the results of a corrective measures assessment conducted under [NEW RULE XLII], the owner or operator of a facility shall:

- (a) select a remedy that, at a minimum, meets the standards listed in (2);
 - (b) submit to the department for approval, within 90 days after the date of the department's approval of the assessment of corrective measures plan required in [NEW RULE XXLII(1)], a selected remedy report describing how the selected remedy would meet the standards in (2) through (4), and how it would be implemented;
 - (c) submit design plans for the selected remedy, and construction quality control (CQC) and construction quality assurance (CQA) plans to the same extent required in [NEW RULE XXXIV]; and
 - (d) notify the department, within 14 days after obtaining department approval of the selected remedy report, that the selected remedy report, design plans, and CQC and CQA plans have been placed in the operating record.
- (2) Remedies in (1) must satisfy the following:
- (a) be protective of human health and the environment;
 - (b) attain the ground water protection standard as specified pursuant to [NEW RULE XLI(8) or (9)];
 - (c) control the source(s) of releases so as to reduce or eliminate, to the maximum extent practicable, further releases of a constituent in Appendix II to 40 CFR part 258 (July 1, 2008) into the environment that may pose a threat to human health or the environment; and
 - (d) comply with standards for management of wastes as specified in [NEW RULE XLIV(4)].
- (3) In selecting a remedy that meets the standards of (2), the owner or operator shall consider the following evaluation factors:
- (a) the long- and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful, based on consideration of the following:
 - (i) magnitude of reduction of existing risks;

- (ii) magnitude of residual risks in terms of likelihood of further releases due to waste remaining following implementation of a remedy;
 - (iii) the type and degree of long-term management required, including monitoring, operation, and maintenance;
 - (iv) short-term risks that might be posed to the community, workers, or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and redisposal or containment;
 - (v) time until full protection is achieved;
 - (vi) potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, redisposal, or containment;
 - (vii) long-term reliability of the engineering and institutional controls; and
 - (viii) potential need for replacement of the remedy;
 - (b) the effectiveness of the remedy in controlling the source to reduce further releases, based on consideration of the following factors:
 - (i) the extent to which containment practices will reduce further releases; and
 - (ii) the extent to which treatment technologies may be used;
 - (c) the ease or difficulty of implementing a potential remedy(s), based on consideration of the following factors:
 - (i) degree of difficulty associated with constructing the technology;
 - (ii) expected operational reliability of the technologies;
 - (iii) need to coordinate with and obtain necessary approvals and permits from other agencies;
 - (iv) availability of necessary equipment and specialists; and
 - (v) available capacity and location of needed treatment, storage, and disposal services;
 - (d) practicable capability of the owner or operator, including consideration of technical and economic capability; and
 - (e) the degree to which community concerns are addressed by a potential remedy(s).
- (4) An owner or operator required by (1) to select a remedy shall specify as part of the selected remedy a schedule(s) for initiating and completing remedial activities. Such a schedule must require the initiation of remedial activities within a reasonable period of time, taking into consideration the factors in (4)(a) through (h). The owner or operator shall consider the following factors in determining the schedule of remedial activities:
- (a) extent and nature of contamination;
 - (b) practical capabilities of remedial technologies in achieving compliance with ground water protection standards established under [NEW RULE XLI(8) or (9)] and other objectives of the remedy;
 - (c) availability of treatment or disposal capacity for wastes managed during implementation of the remedy;
 - (d) desirability of utilizing technologies that are not currently available, but that may offer significant advantages over already available technologies in terms of effectiveness, reliability, safety, or ability to achieve remedial objectives;

- (e) potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;
- (f) resource value of the aquifer, including:
 - (i) current and future uses;
 - (ii) proximity and withdrawal rate of users;
 - (iii) ground water quantity and quality;
 - (iv) the potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;
 - (v) the hydrogeologic characteristic of the facility and surrounding land;
 - (vi) ground water removal and treatment costs;
 - (vii) the cost and availability of alternative water supplies; and
 - (viii) the practicable capability of the owner or operator; and
- (g) any other factor determined by the department to be necessary to protect human health or the environment.

(5) The department may determine that remediation of a release of a constituent in Appendix II to 40 CFR part 258 (July 1, 2008) from a Class II or Class IV landfill unit is not necessary if the unit's owner or operator demonstrates to the satisfaction of the department that:

- (a) the ground water is additionally contaminated by substances that have originated from a source other than the unit and those substances are present in concentrations such that cleanup of the release from the unit would provide no significant reduction in risk to actual or potential receptors; or
- (b) the constituent(s) is present in ground water that:
 - (i) is not currently, or reasonably expected to be, a source of drinking water; and
 - (ii) is not hydraulically connected with waters to which the constituent is migrating or is likely to migrate in a concentration(s) that would exceed the ground water protection standards established under [NEW RULE XLI];
- (c) remediation of the release(s) is technically impracticable; or
- (d) remediation results in unacceptable cross-media impacts.

(6) A determination by the department pursuant to (5) does not affect the authority of the department to require the owner or operator to undertake source control measures or other measures that may be necessary to eliminate or minimize further releases to the ground water, to prevent exposure to the ground water, or to remediate the ground water to concentrations that are technically practicable and significantly reduce threats to human health or the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XLIV IMPLEMENTATION OF THE CORRECTIVE ACTION PROGRAM (1) Based on the schedule established under [NEW RULE XLIII(4)] for initiation and completion of remedial activities, an owner or operator required by [NEW RULE XLIII] to select a remedy shall:

- (a) submit for department approval, and if approved, establish and implement, a corrective action ground water monitoring program that:

(i) at a minimum, meets the requirements of an assessment monitoring program under [NEW RULE XLI];

(ii) indicates the effectiveness of the corrective action remedy; and

(iii) demonstrates compliance with the ground water protection standard pursuant to (5);

(b) implement the corrective action remedy selected under [NEW RULE XLIII];

(c) submit for department approval, and if approved, take any interim measures necessary to ensure the protection of human health and the environment. Interim measures must, to the greatest extent practicable, be consistent with the objectives of, and contribute to the performance of, any remedy that may be required pursuant to [NEW RULE XLIII]. The following factors must be considered by an owner or operator and the department in determining whether interim measures are necessary:

(i) time required to develop and implement a final remedy;

(ii) actual or potential exposure of nearby populations or environmental receptors to constituents in Appendix II to 40 CFR part 258 (July 1, 2008);

(iii) actual or potential contamination of drinking water supplies or sensitive ecosystems;

(iv) further degradation of the ground water that may occur if remedial action is not initiated expeditiously;

(v) weather conditions that may cause constituents to migrate or be released;

(vi) risks of fire or explosion, or potential for exposure to constituents as a result of an accident or failure of a container or handling system; and

(vii) other situations that may pose threats to human health and the environment; and

(d) submit to the department, by April 1 of each year, an annual corrective measures progress report. The progress report must cover the preceding 12-month period. The progress report must include the following information:

(i) a description of all corrective action work completed;

(ii) all relevant sampling and analysis data;

(iii) summaries of all deviations from the selected remedy;

(iv) summaries of all problems or potential problems encountered and any actions taken to rectify the problems;

(v) an updated schedule for achieving compliance with all applicable standards; and

(vi) any other information determined by the department to be necessary to protect human health or the environment.

(2) An owner or operator of a facility may determine, based on information developed after implementation of the remedy has begun or other information, that compliance with requirements of [NEW RULE XLIII(2)] is not being achieved through the remedy selected. In such cases, the owner or operator shall implement other methods or techniques that:

(a) are developed by following the procedures in [NEW RULE XLIII(1) through (4)]; and

(b) could practicably achieve compliance with the requirements, unless the owner or operator makes the determination under (3).

(3) If the owner or operator submits for department approval a determination that compliance with requirements under [NEW RULE XLIII(2)] cannot be practically achieved with any currently available methods, the owner or operator shall, within 60 days after obtaining department approval:

(a) submit a certification of a qualified ground water scientist for department approval that compliance with requirements under [NEW RULE XLIII(2)] cannot be practically achieved with any currently available methods;

(b) implement alternate measures to control exposure of humans or the environment to residual contamination, as necessary to protect human health and the environment;

(c) implement alternate measures for control of the sources of contamination, or for removal or decontamination of equipment, units, devices, or structures that are:

(i) technically practicable; and

(ii) consistent with the overall objective of the remedy;

(d) submit for department approval a report justifying the alternative measures selected pursuant to (3)(b) and (c); and

(e) notify the department within 14 days after obtaining department approval that the report justifying the alternative measures in (3)(d) has been placed in the operating record.

(4) All solid wastes managed pursuant to a remedy required under [NEW RULE XLIII], or an interim measure required under (1)(c), must be managed in a manner that:

(a) is protective of human health and the environment; and

(b) complies with applicable RCRA requirements.

(5) A remedy selected pursuant to [NEW RULE XLIII] is complete when:

(a) the owner or operator complies with the ground water protection standards established under [NEW RULE XLI] at all points within the plume of contamination that lie beyond the ground water monitoring well system established under [NEW RULE XXXVIII(1)];

(b) compliance with the ground water protection standards established under [NEW RULE XLI] has been achieved by demonstrating, using the statistical procedures and performance standards in [NEW RULE XXXIX(7) and (8)], that concentrations of constituents in Appendix II to 40 CFR part 258 (July 1, 2008) have not exceeded the ground water protection standards for a period of three consecutive years; and

(c) all actions required to remediate the release have been completed.

(6) The department may specify an alternative to the period in (5)(b) after taking into consideration:

(a) extent and concentration of the release(s);

(b) behavior characteristics of the constituents in the ground water;

(c) accuracy of monitoring or modeling techniques, including any seasonal, meteorological, or other environmental variabilities that may affect accuracy; and

(d) characteristics of the ground water.

(7) Within 14 days after completion of the remedy specified in (5), the owner or operator shall submit to the department for approval a certification that the remedy has been completed in compliance with the requirements of (5), and (6) if

applicable, and place the certification in the operating record. The certification must be signed by the owner or operator and by a qualified ground water scientist.

(8) When the certification required in (7) is approved by the department, the owner or operator must be released from the requirements for financial assurance for corrective action under ARM 17.50.540.

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XLV HYDROGEOLOGIC AND SOILS CHARACTERIZATION

(1) The owner or operator of a facility required to monitor ground water shall prepare a site-specific hydrogeologic and soils report, pursuant to (2), for the facility. The following criteria and exceptions also apply:

(a) The owner or operator of a Class IV landfill unit located within the ground water monitoring network of a licensed Class II landfill is not required to submit a hydrogeologic and soils report;

(b) The owner or operator of an existing facility or lateral expansion required to monitor ground water under this rule shall submit to the department for approval a hydrogeologic and soils work plan that describes the proposed sampling, analysis, and collection methods for the data required in (2), within the following time frames:

(i) draft work plan(s) must be submitted within 90 days after the department mails a notification to applicant that a hydrogeologic and soils report is required;

(ii) revised work plan(s) must be submitted within 30 days after the department comments are mailed to the applicant; and

(iii) final hydrogeologic and soils reports must be submitted within 180 days after the department's approval of the work plan is mailed by the department to the applicant.

(2) A hydrogeologic and soils report required in (1) must include the following:

(a) descriptions of the regional and facility specific geologic and hydrogeologic characteristics affecting ground water flow beneath the facility, including:

(i) regional and facility specific stratigraphy;

(ii) structural geology;

(iii) ground water potentiometric maps;

(iv) a discussion of any regional deep aquifers;

(v) regional and facility specific ground water flow patterns;

(vi) characterization of seasonal variations in the ground water flow regime;

and

(vii) identification and description of the confining layers present, both above and below the saturated zone(s);

(b) an analysis of any topographic features that influence the ground water flow;

(c) a description of the hydrogeologic units that overlie the uppermost aquifer or that may be part of the leachate migration pathways at the facility, including saturated and unsaturated units;

(d) a description of hydrogeologically significant sand and gravel layers in

unconsolidated deposits;

(e) a description of manmade structures that affect the hydrogeology of the site, such as:

- (i) local water supply wells;
- (ii) pipelines;
- (iii) drains;
- (iv) ditches; and
- (v) septic tanks;

(f) for each ground water monitoring well at the facility, the following information:

- (i) location;
- (ii) elevation;
- (iii) well log;
- (iv) sampling history; and
- (v) operational history; and

(g) any other information determined by the department to be necessary to protect human health or the environment.

(3) If soil borings are necessary to obtain the information required in (2), the soil borings must be conducted as follows:

- (a) all borings must be within 300 feet of the limits of waste filling, if practical;
- (b) borings must extend a minimum of 20 feet below the base of waste disposal areas, or to bedrock, whichever is less;

(c) the minimum required number of borings is as follows:

- (i) 0-10 acres..... 15 borings;
- (ii) 11-20 acres..... add one boring per additional acre;
- (iii) 20-40 acres add one boring per additional two acres; and
- (iv) 41 or more acres..... add one boring per additional four acres;

(d) 75% of the required number of borings may be conducted with a backhoe to a depth of ten feet; and

(e) borings not converted to wells must be abandoned pursuant to [NEW RULE XLVI].

AUTH: 75-10-204, MCA

IMP: 75-10-204, 75-10-207, MCA

NEW RULE XLVI MONITORING WELL ABANDONMENT (1) The owner or operator of a solid waste management facility shall:

(a) completely seal all abandoned borings, water supply wells, and monitoring wells with grout or bentonite to prevent future contamination of ground water. The sealing materials must be continuous, physically and chemically stable, and have a hydraulic conductivity of less than 1×10^{-5} cm/sec;

(b) immediately abandon, after drilling and completion of soil testing, all boreholes not completed as a monitoring well, piezometer, or water supply well;

(c) for any borehole deeper than the well to be placed in it, seal with bentonite pellets or a bentonite slurry the portions of the borehole below the well screen; and

(d) conduct all abandonment activities in accordance with ARM 36.21.670

through 36.21.678 and 36.21.810.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: Proposed New Rules XXXV through XLVI would comprise New Subchapter IV. The department is proposing to repeal the existing solid waste landfill ground water rules and adopt a new subchapter that contains new landfill ground water rules. The proposed new rules are equivalent to the existing landfill ground water rules.

The reasons for New Rule XXXV are the same as set forth in the statement of reasonable necessity for ARM 17.50.501(3), (4), and (5).

The definitions in New Rule XXXVI are being proposed for the same reasons as set forth in the statement of reasonable necessity for the amendments to ARM 17.50.502.

The department is proposing in New Rules XXXVII through XLVI to adopt language allowing it to require additional information if necessary to protect human health or the environment. The reason for this is the same as that described for the amendment to ARM 17.50.508.

The department is proposing in New Rule XLIV(8) to require that certification that a corrective action remedy is complete be submitted to the department for approval. The reason for this provision is that certification completes corrective action and authorizes release of financial assurance, and the department needs to review such a certification before an owner or operator's responsibilities for corrective action should be ended.

NEW RULE XLVII GENERAL PROVISIONS (1) All applicants, licensees, owners, and operators of solid waste management systems and facilities shall comply with this subchapter, except as otherwise specifically provided in this subchapter. Wherever there is a requirement imposed on an owner or operator in this subchapter, the licensee also shall comply with that requirement.

(2) Whenever a person, including an applicant or owner or operator, is required by this subchapter to submit a document for department approval of an action, the person may not take that action unless the person first submits a document containing all information necessary for the department to determine whether the action complies with the requirements of this subchapter and obtains department approval.

(3) When authorized by a court order or an agreement between the department and a landowner on whose property a violation of Title 75, chapter 10, part 2, MCA, or this subchapter has occurred, the department may act, either directly or through a third party, to physically remediate a violation of Title 75, chapter 10, part 2, MCA, or this subchapter.

(4) Whenever the department determines under this subchapter that any information, submittal, plan, factor, procedure, condition, criterion, requirement, or change is necessary to protect human health or the environment, it shall mail notification of the determination to the appropriate applicant, owner, operator, or licensee.

AUTH: 75-10-204, MCA
IMP: 75-10-204, MCA

NEW RULE XLVIII DEFINITIONS In this subchapter, the following definitions apply:

- (1) "Active life" has the meaning given in ARM 17.50.502.
- (2) "Class II landfill facility" has the meaning given in ARM 17.50.504.
- (3) "Class III landfill facility" has the meaning given in ARM 17.50.504.
- (4) "Class IV landfill facility" has the meaning given in ARM 17.50.504.
- (5) "Closure" has the meaning given in ARM 17.50.502.
- (6) "Department" has the meaning given in ARM 17.50.502.
- (7) "Existing disposal unit" has the meaning given in ARM 17.50.502.
- (8) "Facility" has the meaning given in ARM 17.50.502.
- (9) "Ground water" has the meaning given in ARM 17.50.502.
- (10) "Landfill" has the meaning given in ARM 17.50.502.
- (11) "Lateral expansion" has the meaning given in ARM 17.50.502.
- (12) "Leachate" has the meaning given in ARM 17.50.502.
- (13) "Operator" has the meaning given in ARM 17.50.502.
- (14) "Owner" has the meaning given in ARM 17.50.502.
- (15) "Post-closure care" has the meaning given in ARM 17.50.502.
- (16) "Unit" has the meaning given in ARM 17.50.502.

AUTH: 75-10-204, MCA
IMP: 75-10-204, MCA

NEW RULE XLIX CLOSURE CRITERIA (1) The owner or operator of a Class II or Class IV landfill unit shall install a final cover system that is designed to minimize infiltration and erosion. The final cover system must be designed and constructed to:

(a) have a permeability no greater than to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} cm/sec, whichever is less;

(b) minimize infiltration through the closed Class II or Class IV landfill unit by the use of an infiltration layer that contains at least 18 inches of earthen material; and

(c) minimize erosion of the final cover by the use of an erosion layer that contains at least six inches of earthen material that is capable of sustaining native plant growth.

(2) The department may approve an alternative final cover design for a Class II or Class IV landfill unit that includes:

(a) an infiltration layer that achieves a reduction in infiltration equivalent to the infiltration layer specified in (1)(a) and (b); and

(b) an erosion layer that provides protection from wind and water erosion equivalent to the erosion layer specified in (1)(c).

(3) An owner or operator of a Class II or Class IV landfill unit that disposes of 20 tons or less of solid waste per day, based on an annual average, shall comply

with alternative requirements for the infiltration barrier that may be established by the department after public review and comment. An alternative requirement established under this subsection must:

- (a) consider the unique characteristics of small communities;
- (b) take into account climatic and hydrogeologic conditions; and
- (c) protect human health and the environment.

(4) The owner or operator of a Class II or Class IV landfill unit or a lateral expansion of that unit shall submit a closure plan to the department for approval that describes the steps necessary to close all Class II and Class IV landfill units and lateral expansions at the facility at any point during their active life in accordance with the cover design requirements in (1) or (2), as applicable. The closure plan must include the following information and any other information determined by the department to be necessary to protect human health or the environment:

- (a) a description of the final cover, designed in accordance with (1), and the methods and procedures to be used to install the cover;
- (b) an estimate of the largest area of the Class II or Class IV landfill unit ever requiring a final cover, as required under (1), at any time during the active life of the unit;
- (c) an estimate of the maximum inventory of wastes ever on-site over the active life of the landfill facility; and
- (d) a schedule for completing all activities necessary to satisfy the closure criteria in this rule.

(5) For all closure construction, the owner or operator shall submit for department approval plans, specifications, reports, and certifications, to the same extent as required in [NEW RULE XXXIV].

(6) The owner or operator shall notify the department that a closure plan has been prepared and placed in the operating record no later than [THE EFFECTIVE DATE OF THIS RULE], or by the initial receipt of waste, whichever is later.

(7) Prior to beginning closure of each Class II or Class IV landfill unit as specified in (8), an owner or operator of a facility shall submit to the department a notice of the intent to close the unit and place the notice in the operating record.

(8) The owner or operator of a Class II or Class IV landfill unit shall begin closure activities of that unit no later than 30 days after the date on which the unit receives the known final receipt of wastes or, if the unit has remaining capacity and there is a reasonable likelihood that the unit will receive additional wastes, no later than one year after the most recent receipt of wastes. Extensions beyond the one-year deadline for beginning closure may be granted by the department if the owner or operator demonstrates that the unit has the capacity to receive additional wastes and the owner or operator has taken, and will continue to take, all steps necessary to prevent threats to human health and the environment from the unclosed unit.

(9) The owner or operator of a Class II or Class IV landfill unit shall complete closure activities of the unit in accordance with the closure plan within 180 days following the beginning of closure, as specified in (8). Extensions of the closure period may be granted by the department if the owner or operator demonstrates that closure will, of necessity, take longer than 180 days and that the owner or operator has taken, and will continue to take, all steps to prevent threats to human health and the environment from the unclosed unit.

(10) Following closure of a Class II or Class IV landfill unit, the owner or operator shall notify the department that a certification, signed by an independent licensed professional engineer, verifying that closure has been completed in accordance with the closure plan, has been placed in the operating record. A unit is not considered closed until the department has conducted an inspection and approved the certification.

(11) The owner or operator may request permission from the department to remove the notation from the deed if all wastes have been removed from the facility.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE L POST-CLOSURE CARE REQUIREMENTS (1) Following closure of a Class II or Class IV landfill unit, the owner or operator shall conduct post-closure care. Post-closure care must be conducted for 30 years, except as provided under (2), and consist of the following:

(a) maintaining the integrity and effectiveness of any final cover, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;

(b) maintaining and operating the leachate collection and removal system in accordance with the requirements in [NEW RULE XXXIII], if applicable. The department may allow the owner or operator to stop managing leachate if the owner or operator submits to the department for approval a demonstration that leachate no longer poses a threat to human health and the environment;

(c) monitoring the ground water in accordance with the requirements of ARM Title 17, chapter 50, [NEW SUBCHAPTER IV], and maintaining the ground water monitoring system, if applicable;

(d) maintaining and operating the gas monitoring system in accordance with the requirements of [NEW RULE XVII]; and

(e) any other measure determined by the department to be necessary to protect human health or the environment.

(2) The length of the post-closure care period may be:

(a) decreased by the department if the owner or operator demonstrates that the reduced period is sufficient to protect human health and the environment and this demonstration is approved by the department; or

(b) increased by the department if the department determines that the lengthened period is necessary to protect human health and the environment.

(3) The owner or operator of a Class II or Class IV landfill unit shall submit a post-closure plan to the department for approval that includes the following information and any other information determined by the department to be necessary to protect human health or the environment:

(a) a description of the monitoring and maintenance activities required in (1) for each Class II or Class IV landfill unit, and the frequency at which these activities will be performed;

(b) the name, address, and telephone number of the person or office to contact about the facility during the post-closure period; and

(c) a description of the planned uses of the property during the post-closure period. Post-closure use of the property may not disturb the integrity of a final cover, liner, or a component of the containment system, or the function of the monitoring systems, unless necessary to comply with the requirements in ARM Title 17, chapter 50, subchapters 5 through [NEW SUBCHAPTER V]. The department may approve any other disturbance if the owner or operator submits to the department for approval a demonstration that disturbance of a final cover, liner, or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.

(4) No later than the initial receipt of waste, the owner or operator shall notify the department that a post-closure plan has been prepared and placed in the operating record.

(5) Following completion of the post-closure care period for each Class II or Class IV landfill unit, the owner or operator shall notify the department that a certification, signed by an independent licensed professional engineer, verifying that post-closure care has been completed in accordance with the post-closure plan, has been placed in the operating record. The post-closure care period is not considered complete until the department has approved a certification submitted under this subsection.

(6) The owner or operator of a facility containing a Class II or Class IV landfill unit shall amend the closure or post-closure plan whenever changes in the operation and maintenance plan or facility design plan or events occur during the active life of the landfill that significantly affect the closure or post-closure plan. The owner or operator also shall amend the closure or post-closure plan whenever there is a change in the expected year of closure. The owner or operator shall submit the necessary closure or post-closure plan amendments to the department for approval within 60 days after such changes occur or within a shorter period if determined by the department to be necessary to protect human health or the environment.

(7) For all post-closure construction at a Class II or Class IV landfill unit, the owner or operator of a facility shall submit for department approval plans, specifications, reports, and certifications to the same extent as required in [NEW RULE XXXIV].

(8) During the post-closure care period the owner or operator of a facility containing a Class II or Class IV landfill unit shall:

(a) maintain adequate vegetative cover, as specified in the closure plan;

(b) maintain and operate all corrective action systems pursuant to ARM Title 17, chapter 50, [NEW SUBCHAPTER IV];

(c) annually inspect and submit to the department a report on the condition of all landfill systems; and

(d) comply with any other post-closure care requirements determined by the department to be necessary to protect human health or the environment.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

NEW RULE LI CLOSURE AND POST-CLOSURE CARE REQUIREMENTS
FOR CLASS III LANDFILL UNITS (1) A Class III landfill unit closure plan required

under ARM 17.50.508 must include:

- (a) procedures for construction of two feet of final cover and placement of six inches of top soil;
 - (b) procedures for grading and seeding to prevent erosion;
 - (c) the deed notation specified in [NEW RULE XXIV], unless all wastes are removed from the landfill unit and the owner or operator of a facility receives approval from the department to remove the notation from the deed; and
 - (d) any other information determined by the department to be necessary to protect human health or the environment.
- (2) A Class III landfill unit post-closure plan required under ARM 17.50.508 must include descriptions of procedures for:
- (a) maintaining the integrity of the final cover;
 - (b) maintaining adequate vegetative cover;
 - (c) erosion control; and
 - (d) any other procedures determined by the department to be necessary to protect human health or the environment.
- (3) The owner or operator of an existing Class III landfill unit shall submit for department approval closure and post-closure plans that meet the requirements of this rule by [60 DAYS AFTER THE EFFECTIVE DATE OF THIS RULE].
- (4) The owner or operator of a Class III landfill unit shall give notice of intent to close the landfill to the same extent as required of a Class II landfill unit in [NEW RULE XXVI], and shall close the landfill and conduct post-closure care in compliance with the closure and post-closure plans required in this rule.

AUTH: 75-10-204, MCA

IMP: 75-10-204, MCA

REASON: Proposed New Rules XLVII through LI would comprise New Subchapter V. The department is proposing to repeal the existing solid waste program landfill closure and post-closure care rules and adopt a new subchapter that contains new landfill closure and post-closure care rules. The proposed new rules are equivalent to the existing landfill closure and post-closure care rules.

The reasons for New Rule XLVII are the same as set forth in the statement of reasonable necessity for ARM 17.50.501(3), (4), and (5).

The definitions in New Rule XLVIII are being proposed for the same reasons as set forth in the statement of reasonable necessity for the amendments to ARM 17.50.502.

The department is proposing in New Rules XLIX through LI to adopt language allowing it to require additional information, if necessary, to protect human health or the environment. The reason for this is the same as that described for the amendment to ARM 17.50.508.

6. The rules proposed to be repealed are as follows:

17.50.505 STANDARDS FOR SOLID WASTE MANAGEMENT FACILITIES
(AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4197, Administrative Rules of Montana. This rule would be replaced by New Rule III

Definitions, New Rule IV Airport Safety, New Rule V Floodplains, New Rule VI Wetlands, New Rule VII Fault Areas, New Rule VIII Seismic Areas, New Rule IX Unstable Areas, New Rule X Landfill Units Not Meeting Certain Requirements, and New Rule XI Location Restrictions.

17.50.506 DESIGN CRITERIA FOR LANDFILLS (AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4201, Administrative Rules of Montana. This rule would be replaced by New Rule XXXI Definitions, New Rule XXXII Small Community Exemption, New Rule XXXIII Design Criteria - Class II and Class IV Landfill, and New Rule XXXIV Additional Design Criteria - Class II and Class IV Landfill.

17.50.510 GENERAL OPERATIONAL AND MAINTENANCE REQUIREMENTS--SOLID WASTE MANAGEMENT SYSTEMS (AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4215, Administrative Rules of Montana. This rule would be replaced by New Rule XIII Definitions, New Rule XVI Disease Vector Control, New Rule XVIII Air Criteria, and New Rule XIX Access Requirements.

17.50.511 SPECIFIC OPERATIONAL AND MAINTENANCE REQUIREMENTS--SOLID WASTE MANAGEMENT SYSTEMS (AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4217, Administrative Rules of Montana. This rule would be replaced by New Rule XIII Definitions, New Rule XIV Procedures for Excluding the Receipt of Hazardous Waste, New Rule XV Cover Material Requirements, New Rule XVII Explosive Gases Control, New Rule XVIII Air Criteria, New Rule XX Run-on and Run-off Control Systems, New Rule XXI Surface Water Requirements, New Rule XXII Liquids Restrictions, New Rule XXIII Recordkeeping Requirements, and New Rule XXVII Operating Criteria.

17.50.526 ENFORCEMENT (AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4255, Administrative Rules of Montana. This rule would be replaced by ARM 17.50.501(4).

17.50.530 CLOSURE REQUIREMENTS FOR LANDFILLS (AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4259, Administrative Rules of Montana. This rule would be replaced by New Rule XLVIII Definitions, New Rule XLIX Closure Criteria, New Rule L Post-closure Care Requirements, and New Rule LI Closure and Post-closure Care Requirements for Class III Landfill Units.

17.50.531 POST-CLOSURE CARE REQUIREMENTS FOR CLASS II LANDFILLS (AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4263, Administrative Rules of Montana. This rule would be replaced by New Rule XLVIII Definitions, and New Rule L Post-closure Care Requirements.

17.50.542 FINANCIAL ASSURANCE REQUIREMENTS FOR CLASS IV LANDFILLS (AUTH: 75-10-204, MCA; IMP: 75-10-204, MCA), located at page 17-4301, Administrative Rules of Montana. This rule would be replaced by New Rule

XXIX Operating Criteria for Class IV Landfill Units.

17.50.701 PURPOSE AND APPLICABILITY (AUTH: 75-10-204, MCA; IMP: 75-10-204, 75-10-207, MCA), located at page 17-4401, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions and New Rule XXXVII Applicability of Landfill Ground Water Monitoring and Corrective Action.

17.50.702 DEFINITIONS (AUTH: 75-10-204, MCA; IMP: 75-10-204, 75-10-207, MCA), located at page 17-4402, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions.

17.50.705 HYDROGEOLOGICAL AND SOILS STUDY (AUTH: 75-10-204, MCA; IMP: 75-10-204, 75-10-207, MCA), located at page 17-4415, Administrative Rules of Montana. This rule would be replaced by New Rule XLV Hydrogeologic and Soils Characterization.

17.50.706 LOCATION AND NUMBER OF MONITORING WELLS (AUTH: 75-10-204, MCA; IMP: 75-10-204, 75-10-207, MCA), located at page 17-4419, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions, and New Rule XXXVIII Ground Water Monitoring Systems.

17.50.707 MONITORING WELL CONSTRUCTION (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4420, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions and New Rule XXXVIII Ground Water Monitoring Systems.

17.50.708 SAMPLING AND ANALYSIS PLAN (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4431, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions, New Rule XXXIX Ground Water Sampling and Analysis Requirements, and New Rule XL Detection Monitoring Program.

17.50.709 REPORTING AND PLANNING REQUIREMENTS (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4461, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions and New Rule XLI Assessment Monitoring Program.

17.50.710 DEFINITION OF EXTENT OF CONTAMINATION (AUTH: 75-10-204, MCA; IMP: 75-10-204, 75-10-207, MCA), located at page 17-4462, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions, New Rule XXXVIII Ground Water Monitoring Systems, New Rule XLI Assessment Monitoring Program, New Rule XLII Assessment of Corrective Measures, New Rule XLIII Selection of Remedy, and New Rule XLIV Implementation of the Corrective Action Program.

17.50.715 PHASED LANDFILL CONSTRUCTION (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4481, Administrative Rules of Montana.

This rule would be replaced by New Rule XXXVIII Ground Water Monitoring Systems.

17.50.716 LATERAL LANDFILL EXPANSION (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4481, Administrative Rules of Montana. This rule would be replaced by ARM 17.50.508(1).

17.50.720 MONITORING DURING CLOSURE (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4485, Administrative Rules of Montana. This rule would be replaced by New Rule XLVIII Definitions and New Rule XLIX Closure Criteria.

17.50.721 POST-CLOSURE MONITORING (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4485, Administrative Rules of Montana. This rule would be replaced by New Rule XLVIII Definitions and New Rule L Post-closure Care Requirements.

17.50.722 MONITORING WELL ABANDONMENT (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4485, Administrative Rules of Montana. This rule would be replaced by New Rule XLVI Monitoring Well Abandonment.

17.50.723 NO-MIGRATION DEMONSTRATION (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4486, Administrative Rules of Montana. This rule would be replaced by New Rule XXIX Operating Criteria for Class IV Landfill Units, and New Rule XXXIV Additional Design Criteria - Class II and Class IV Landfill.

17.50.724 MONITORING WELL NETWORK MAINTENANCE (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4486, Administrative Rules of Montana. This rule would be replaced by New Rule XXXVI Definitions and New Rule XXXVIII Ground Water Monitoring Systems.

17.50.725 DEPARTMENT APPROVAL REQUIRED (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4487, Administrative Rules of Montana. This rule would be replaced by ARM 17.50.501(4).

17.50.726 INSPECTIONS (AUTH: 75-10-204, MCA; IMP: 75-10-207, MCA), located at page 17-4487, Administrative Rules of Montana. This rule would be replaced by ARM 17.50.501(5).

7. Concerned persons may submit their data, views, or arguments, either orally or in writing, at the hearing. Written data, views, or arguments may also be submitted to Elois Johnson, Paralegal, Department of Environmental Quality, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; or e-mailed to ejohnson@mt.gov, no later than April 17, 2009. To be guaranteed consideration, mailed comments must be postmarked on or before that

date.

8. Norm Mullen, attorney, has been designated to preside over and conduct the hearing.

9. The department maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Such written request may be mailed or delivered to Elois Johnson, Paralegal, Legal Unit, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, e-mailed to ejohnson@mt.gov, or may be made by completing a request form at any rules hearing held by the department.

10. The bill sponsor notice requirements of 2-4-302, MCA, do not apply.

Reviewed by:

DEPARTMENT OF ENVIRONMENTAL
QUALITY

/s/ David Rusoff
DAVID RUSOFF
Rule Reviewer

BY: /s/ Richard H. Opper
Richard H. Opper, Director

Certified to the Secretary of State, February 17, 2009.